CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, November 18, 1909.

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CONSTRUCTION NEWS.

Plans and Specifications on File.

(* *denotes that this work is advertised in Engineering News.*)

The following plans (P.) and Specifications (S.) are on file (for reference only unless otherwise noted) at office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.	Work.	See issue.
11-20	Dredging, Charleston, S. C...(S.)	10-21
11-20	Generating set, Wash., D. C...(S.)	10-21
11-27	Pneumatic system, Charleston, S. C.........(S.)	10-28
11-27	Seawall, N. Chicago, Ill......(S.)	11- 4
11-27	Roads, walks, N. Chicago, Ill. (S.)	11- 4
11-27	Jetty work, Dallas, Tex......(S.)	11-11
12- 1	*Heating, ventilating, New Zealand ....(P. & S.)	9- 9
12- 4	Storage-house, Boston, Mass..(S.)	11-11
12-14	Pump-house, Ft. Logan, Colo.(S.)	11-18
12-18	R. R. system extension, California (Rys.) ....(S.)	11-18
1-17	*Irrigation, Porto Rico...(P. & S.)	10-21
1-18	Dry-dock, New York........(S.)	10-21

List of Contracts Pending.

LIGHT, HEAT AND POWER PLANTS.

11-20	Generating set, Wash., D. C.	10-21
11-22	Heating and pwr. Plant, Supply, Okla	11-18
11-22	Lighting fixtures, New York	11-11
11-23	St. lighting, etc., Oswego, N. Y.	11-18
11-25	Elec. equipment, Springfield, S. Dak	11-18
11-26	Lighting system, Council Bluffs, Iowa	11- 4
11-29	Light system, Valentine, Neb.	11-18
12- 1	Heating, etc., Des Moines, Iowa	11-18
12- 1	Electric work, Portland, Me.	11-11
12- 1	Boilers, Montreal, Que.	11-11
12- 6	*Pumps, Hull, Que.	11-11
12-16	Equipment, Columbus, Ohio	11-18
12-18	Power plant, San Francisco, Cal.	11-11

BRIDGES.

11-19	Bridge, Cincinnati, Ohio	10-28
11-20	Replanking bridge, Clearfield, Pa.	11-18
11-22	Bridge bonds, Spokane, Wash.	10-21
11-22	*Bridge, New Haven, Conn.	11-11
11-29	Bridge, Batavia, Ill.	11- 4
11-29	Bridges, Albuquerque, N. Mex.	11-18
11-30	Bridge, Duncan, Ariz.	11-18
11-30	Substructure, Quebec, Que.	11- 4
12- 2	Bridge, Kappa, Ill.	11-18
12- 6	Bridge, Phoenix, Ariz.	11-18
12- 6	*Bridge work, Monongahela, Pa.	11-18
12- 6	*Bridge, Cincinnati, Ohio	11-18
12- 9	Bridge, Arthabaska, Que.	11-18

BUILDINGS.

11-19	Court-house, New Haven, Conn.	10-28
11-20	Plans, Hartford, Conn.	10-28
11-20	*Quarters, Ft. Douglas, Utah	10-21
11-20	Plans, Stamford, Conn.	11-11
11-22	Post-office, Toronto, Ont.	11-11
11-22	*Hospital, Ft. Terry, N. Y.	10-28
11-22	Plumbing, etc., New York	11-11
11-22	School, Ardmore, Pa.	11-18
11-23	Fire stations, New York	11-18
11-23	Lumber, etc., New York	11-11
11-23	Heating, New York	11-11
11-24	Heating, New York	11-18
11-24	Hospital, San Francisco, Cal.	11-18
11-24	Post-office, Montgomery, Ala.	10-28
11-24	Bakery, Boise Barracks, Idaho (Mfg. Pl.)	11- 4
11-24	Building, Greenville, Ohio	11-11
11-26	Building, Columbus Barracks, O.	11-11
11-26	Heating, etc., Council Bluffs, Ia.	10-28
11-29	Schools, New York	11-18
11-30	Roofing, etc., New York	11-18
12- 1	*Heating, ventilating, New Zealand	9- 9
12- 1	*Capitol, Little Rock, Ark.	10-21
12- 1	Barracks, Ft. Riley, Kan.	11-11
12- 2	Post-office, New Brunswick, N. J.	10-28
12- 4	Storage house, Boston, Mass.	11-11
12- 6	Post-office, Hot Springs, Ark.	11-11
12- 6	*Quarters, etc., Ft. Meade, S. Dak.	11- 4
12- 6	*Quarters, Ft. Meade, S. Dak.	11-18
12- 6	Workhouse, New Albany, Ind.	11-18
12- 9	Post-office, Oklahoma City Okla.	11-11
12-10	*Quarters, Ft. Morgan, Ala.	11-11
12-15	*Post-office, Davenport, Ia.	11-11
12-20	Heating, etc., Toledo, Ohio	11-18
12-20	*Wiring, etc., Toledo, Ohio	11-18
12-28	*Post-office, Athens, Ohio	11-18

WATER-WORKS.

11-19	*Pump-house, Fort Hancock, N. J.	10-21
11-22	Pipe, Newark, N. J	11-18
11-22	Water bonds, Spokane, Wash.	11- 4
11-22	*Water meters, Washington, D. C.	11-18
11-22	Water pipe, St. Paul, Minn.	11-18
11-23	Water pipe, Providence, R. I.	11-18
11-24	*Dikes, New York	11- 4
11-24	*Headworks, New York	11-11
11-27	Pipe system, Charleston, S. C.	11- 4
11-29	Tower and tank, Savannah, Ga.	11-18
11-30	Water system, Cathlame, Wash.	11-11
12- 1	Water system, Sultan, Wash.	11-18
12- 2	*Siphons, New York	11-18
12- 2	*W.-Works machinery, Indianola, Miss.	11-18
12- 7	*Pipe, etc., Gulfport, Miss.	11-18
12- 7	*Water pipe, East Orange, N. J.	11-18
12-14	Pump house, Fort Logan, Colo.	11-18
12-15	Standpipe, Belden, Neb.	11-11
12-29	Water supply, Philippines	11-18
1- 1	Water-works, Foley, Minn.	11-11

SEWERS.

11-19	*Sewer extensions, Roselle Park, N. J.	10-28
11-19	Sewers, Holly, Colo.	11-18
11-19	Sewer, Enid, Okla.	11-18
11-19	Sewer, Abilene, Kan.	11-18
11-20	Sewer, Galesburg, Ill.	11-18
11-22	Sewer, Oklahoma City, Okla.	11-18
11-22	Sewers, Salem, S. Dak.	11- 4
11-24	Sewer, Brooklyn, N. Y.	11-11
11-24	Sewers, Columbus, Ohio	11-18
11-24	Sewer basin, Brooklyn, N. Y.	11-18
11-24	*Sewer, Syracuse, Ill.	11-18
11-26	Sewers, Denver, Colo.	11-11
11-26	*Sewer, Louisville, Ky.	11-11
11-27	Sewer pipe, Greenville, Ohio	11-18
11-29	Sewers, Traer, Iowa	11-11
11-30	Sewers, New York	11-18
12- 1	Laterals, etc., Vancouver Barracks, Wash.	11-11
12- 1	*Sewers, Baltimore, Md.	11-18
12- 2	Repairing sewers, Morristown, N. J	11-18
12- 6	Sewer System, Greenfield, Ind.	11-11
12- 7	*Discharge pipe line, St. Louis, Mo.	11-18
12- 7	Sewer system, Great Bend, Kan.	11-18
12-10	Sewers, Elmwood Place, Ohio	11-18

STREETS AND ROADS.

11-19	Paving, etc., Denver, Colo.	11- 4
11-19	Paving, Two Rivers, Wis.	10-21
11-19	Paving, etc., Salt Lake City, Utah	11-18
11-22	Sidewalks, Wabash, Ind.	11-11
11-22	Paving, New York	11-11
11-22	Grading, etc., Mineola, N. Y.	11-18
11-22	Grading, Oklahoma City, Okla.	11-18
11-22	Road, Reading, Pa.	11-18
11-23	Paving, St. Clairsville, Ohio	11-11
11-23	*Paving, etc., Paducah, Ky.	11- 4
11-23	Sidewalks, Chicago, Ill.	11-18
11-23	Paving, Trenton, N. J.	11-18
11-23	Paving blocks, Providence, R. I.	11-18
11-24	Streets, Columbus, Ohio	11-11
11-24	Paving, New York	11-11
11-27	Macadam, etc., N. Chicago, Ill.	11-11
11-27	Pavement, etc., Omaha, Neb.	11-11
11-29	Bonds, Jacksonville, Fla.	11-18
11-30	Gravel roads, Harrison, Ind.	11-18
11-30	Paving, New York	11-18
11-30	Gravel road, Plymouth, N. H.	11-18
12- 2	Cement walks, New York	11-18
12- 2	Crib stone, New York	11-18
12- 6	Roads, Tipton, Ind.	11-11
12- 6	Gravel roads, Boonville, Ind.	11-18
12- 6	Gravel road, Greensburg, Ind.	11-18
12- 6	*Paving, Vicksburg, Miss.	11-18
12- 7	Road, Madison, Ind.	11-18
12- 7	Sidewalk, Logansport, Ind.	11-18
12- 7	Road, Crawfordsville, Ind.	11-18
12- 7	Rock roads, Fowler, Ind.	11-18
12- 7	Gravel roads, Vincennes, Ind.	11-18
12- 7	Gravel road, Rockville, Ind.	11-18
12- 8	Gravel road, Muncie, Ind.	11-18
12- 8	Gravel road, Peru, Ind.	11-18

MISCELLANEOUS.

11-19	Dredging, Lynn, Mass.	11-18
11-19	Hook & ladder trucks, New York.	11-11
11-20	Drainage canal, Timberville, Miss.	11- 4
11-20	Dredging, Urbana, Ohio	11-18
11-20	Dredging, Charleston, S. C.	10-21
11-20	Ditches, Tallulah, La.	11-18
11-22	Fence, etc., Boston, Mass.	11-18
11-22	*Iron fence, etc., Boston, Mass.	11-11
11-23	Ditch, Lake Benton, Minn.	11-18
11-23	Hook, Ladder trucks, New York.	11-18
11-23	Lumber, Otisville, N. Y.	11-18
11-24	Dredging, New York	11-11
11-24	Dredging, New York	11-18
11-24	Levee, Helena, Ark.	11-18
11-24	Painting, etc., Baltimore, Md.	11-18
11-26	Dredging, jetties, Boston, Mass.	11-18
11-27	Jetty work, Dallas, Tex.	11-11
11-27	Levee, Charleston, Mo.	11-18
11-27	Pneumatic system, Charleston, S. C	10-28
11-27	Seawall, N. Chicago, Ill.	11- 4
11-30	*Channel, Baltimore, Md.	11- 4
11-30	Regulating, etc., New York	11-18
12- 1	Regulating, etc., New York	11-18
12- 1	Barge canal, Albany, N. Y.	11- 4
12- 1	*Fire apparatus, Wash., D. C.	11- 4
12- 1	Fire hose, Wash., D. C.	11-18
12- 1	Drainage ditches, Liberty, Tex.	10-28
12- 1	Towboat, Little Rock, Ark.	11-11
12- 1	Barge canal, Albany, N. Y.	11-11
12- 2	Loam, New York	11-18
12- 2	Motor lawn mowers, New York	11-18
12- 3	Dumping board (Garbage), New York	11-18
12- 4	Dredging, New York	11-18
12- 8	Levee, New Orleans, La.	11-18
12-10	Pier, Philadelphia, Pa.	11-18
12-13	*Dredging, Wilmington, Del.	11-18
12-18	R. R. system extension, California (Rys.)	11-18
1-17	*Irrigation work, Porto Rico	10-21
1-18	Dry dock, New York	10-21
2- 1	(1910) Monuments, Ottawa, Ont.	10-21

FOREIGN CONTRACTS.

12-10	Competitive plans, Argentina	11- 4

EXAMINATIONS.

11-22	Mechanical Draftsman, Phila., Pa.	10-21
11-23	Examiner of Accounts, Wash., D. C.	10-21
11-23	Junior Electrical Engr., Wash., D. C.	10-28
11-23	Junior Engr., Wash., D. C.	11- 4
11-24	Junior Chemist, Wash., D. C.	11- 4
11-24	Inspector's Asst., Wash., D. C.	10-21
11-24	Drainage Engr., Wash., D. C.	10-21
12- 8	Chart Engraver, Wash., D. C.	11-18
12-11	Bridge Designer, Albany, N. Y.	11-18
12-11	Bridge Draftsman, Albany, N. Y.	11-18
12-11	Junior Bridge Draftsman, Albany, N. Y.	11-18
12-14	Asst. Geologist, Wash., D. C.	11-18
12-14	Assistant, Wash., D. C.	11-18
12-15	Steam Engr., Wash., D. C.	11-18
12-15	Physical Laboratory Aid, Pittsburg, Pa.	11-18
12-15	Dynamo Tender, Ellis Island, N. Y.	11-18
12-15	Electrician and Plumber, Angel Island, Cal.	11-18
12-15	Inspector of Hardware, St. Louis, Mo.	11-18
12-29	Asst. and Teacher, Philippines	11-18

RAILWAYS.

ALBERTA & GREAT WATERWAYS.—W. R. Clarke, Pres., Kansas City, Mo., and Edmonton, Alta., announces that the contract for construction of the first 50 miles of this road will be let within a few weeks, and that as much of the work as possible will be done this winter. The entire right-of-way to Fort McMurray, states Mr. Clarke, will be cleared and the ties distributed this winter. Fully noted on Oct. 21 and Sept 30.

ARKANSAS, LOUISIANA & GULF.—J. M. Parker, Gen. Mgr., Hamburg, Ark., has announced, according to the Little Rock (Ark.) "Gazette," that contract for building a bridge over the Arkansas River on the proposed extension of this line from Pine Bluff, Ark., to Hamburg and Hazen, has been awarded to the BLODGETT BRIDGE BUILDING CO., Kansas City, Mo.

BRYAN & BRAZOS RIVER.—J. W. Howell, W. E. Saunders, J. W. English, J. E. Butler, J. K. Parker, G. S. Parker, J. A. Myers, A. W. Wilkerson and E. H. Astin, all of Bryan, are interested in the project to build a railway, to be called the Bryan & Brazos River Ry., from Bryan, Tex., to a point on the Brazos River, over which a bridge will be built.

CALIFORNIA.—Bids are asked by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., Dec. 18, for constructing an extension of the railroad system at the Mare Island Navy Yard, Cal., specification No. 1679. Specifications are on file at office of Engineering News, New York.

CANADIAN NORTHERN.—DIBONA & ORLANDO BROS. have been awarded a subcontract for the section between Trenton and Brighton, Ont., and have made their headquarters at Trenton.

An agreement has been made with the British Columbia Government, under which, if the general election, to be held this month, is favorable, and the Provincial Legislature gives its sanction, the company will build 600 miles of line from Yellow Head Pass, B. C., west to Vancouver, during the next four years, in consideration of a guarantee of interest by British Columbia on bonds to be issued at $35,000 a mile, according to the "Railroad Age Gazette." "A government official says that a contract has been entered into with the Canadian Northern for the construction of a line from Yellow Head Pass to Kamloops by way of the North Thompson River, and from Kamloops to Westminster and Vancouver; also from a point near Vancouver to English Blugs, for connection with Victoria; also to build a line from Victoria to Barclay Sound. Application will be made for authority to build lines as follows: Dundee, northerly and easterly to the Winnipeg River; Portage la Prairie southerly and easterly to Township 2, Rg. 7 E. P. M.; Hartney, westerly to Township 5, Rg. 7 W. 2 M.; Moosejaw, southerly and easterly to Blenfait, with a branch to Roche Percee; between Davidson and Disley on the Q. L. L. & Sask. Railway, westerly and northwesterly to the Saskatoon-Calgary line; Lashburn, westerly to a point between Camrose and Edmonton; Saskatoon-Calgary line near Township 28, Rg. 6 W. 4 M. to Rocky Mountain House; Saskatoon-Calgary line near crossing of Red Deer River, northwesterly through or near Innisfall and Rocky Mountain House to headwaters of Brazeau and McLeod Rivers and to Yellow Head Pass; Winnipegosia, southerly to south end of Lake Manitoba; from a point between Prince Albert and Battleford, near Township 49, Rg. 3 W. 3 M., northwesterly and northerly to Great Slave Lake; from a point east of Lake Manitoba, westerly via the Narrows, to constructed line between Grandview and Roblin."

CANADIAN PACIFIC.—JOHN TIMOTHY, Calgary, Alta., has a rockwork and bridge contract on the Esquimalt & Nanaimo branch. Cost, $1,000,000.

This company will build a branch from Asquith, on the Pheasant Hills line, northwesterly for 20 miles.

CHICAGO GREAT WESTERN.—The reorganized company will spend about $7,500,000 in reconstruction, improvements and equipment. Grade and curve revision will be undertaken at various points, 20 miles of second track built, and 200 miles of track laid with 85-lb. rails. The automatic block signal system will be installed between Chicago (Forest Home) and Oelwein, Iowa, 235 miles. On the eastern division the maximum grades will be reduced from 1% to 0.5%. Orders have been placed for 34 freight locomotives, 200 steel ballast cars, and 2,000 box cars and 250 stock cars with steel underframes. S. M. Felton, Pres.; L. C. Fritch, Chicago, Ch. Engr.

FORT WORTH & RIO GRANDE.—Contract has been awarded to the C. H. CLARK CONTRACTING CO., Fort Worth, Tex., for the first 17 miles on the extension from Brady to Menardville, Tex. W. B. Drake, Gen. Supt., Fort Worth.

GRAND TRUNK PACIFIC.—Surveys have been completed for the branch line to run from Watrous to Prince Albert, Sask., approximately 101 miles. Contracts for construction will be let this year.

GULF, BROWNWOOD & CISCO.—Contracts may be let next month for building this railroad from Brownwood, Tex., northeast to Romney, Tex., via Cleo, May and Rising Star. S. F. Johnson, of the Brownwood Commercial Club, and others are interested.

LONG ISLAND R. R.—Among the extensive improvements mapped out by the Long Island R. R. Co.'s executive committee, to be undertaken during the year 1910, is the double-tracking of the Oyster Bay branch to Locust Valley, according to the Brooklyn "Eagle." Similar work has been completed during the past year to Glen Cove. The North Side division will be double-tracked to Great Neck and electrified all the way from Long Island City to Port Washington. The Long Beach line is also to be electrified. Two additional tracks are to be laid from Valley Stream to Lynbrook, and one additional track from Springfield to Valley Stream, making a four-track railroad from Jamaica to Lynbrook. The four-tracking of the main line, from Jamaica to Sunnyside yard, and the Pennsylvania tunnels at Long Island City, and the electrification of this whole division, and of the Glendale cutoff, connecting the Rockaway Beach division with the main line, will all be completed and electric trains in operation by Feb. 1. Plans have been prepared for the enormous undertaking of improvement at the Jamaica terminal, involving an expenditure of $3,000,000. It includes the raising of the tracks all the way from Morris Park to Rockaway Junction, at the easterly end of the village of Jamaica, the reconstruction of the entire passenger yard arrangements, the building of a new 9-story depot. Among other plans to be carried into effect in the near future is the double-tracking and electrification of the main line and Wading River branch in Huntington, the main line to Farmingdale, and the Montauk division to Babylon.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—Contract has been awarded to RICHARD EVANS, Minneapolis, Minn., for grading 16 miles of right-of-way on the Plummer-Moose Lake extension. Contract has been awarded to JOHN MOBERG, of Bemidji, Minn., for grading right-of-way between Lakes Irving and Bemidji, eight miles.

NORTH COAST R. R.—Contract has been awarded to C. H. BOYLES, 1628 Jackson Ave., Spokane, Wash., for concrete work on the first 20 miles between Spokane and Tekoa. Estimated cost, $165,000. Grading contracts on the same branch have been let to the following contractors: WASHTOCK & CHEW, Spokane, 12 miles; TRIBBLE & ANDERSON, Spokane, four miles, and G. A. CARLSON & CO., Spokane, seven miles. The work is mostly through rock. The distance is 41 miles between Spokane and Tekoa. Grading operations on the Spokane division of the North Coast R. R., between Spokane and Kiona, were begun Oct. 15. Eleven camps have been established. Bids have been called for by the North Coast R. R. Co. for grading work on the North Priest Rapids branch.

NORTHERN EMPIRE.—A meeting of this company was held in Edmonton, Alta., on Oct. 28 to arrange for commencing construction. Henry Roy, Robert Balfour, Jules F. Fleutot and Edward Hoffman, all of Edmonton, Alta., are the provisional directors.

RALEIGH & SOUTHPORT.—An extension of seven miles will be built from Fayetteville to Hope Mills, N. C. J. A. Mills is Gen. Mgr., Raleigh, N. C.

REGINA SOUTHERN.—This company is seeking incorporation in Canada to build a line from the international boundary to Regina, Sask. The charter also provides for the construction of branches in practically every direction. The application is being made through a firm of solicitors and the names of the incorporators are withheld.

SALEM FALLS CITY & WESTERN.—Plans are under way, it is stated, for building this line from Salem, Ore., west via Dallas and Falls City to Black Rock and eventually west to the Pacific Coast near Siletz Bay, in all about 60 miles. Track has been laid from Dallas west to West Salem, 14 miles. L. Gerlinger is Pres.; S. A. Taylor, Ch. Engr., Portland, Ore.

VIRGINIA.—A company composed of Roanoke, Va., business men has been organized to construct an incline railway from Roanoke River to the top of Mill Mountain. The capital stock subscribed is $30,000. Engineers have started the work of surveying the route. A hotel was constructed on top of the mountain 15 years ago and furnished, but has never been operated. The top of the mountain will be converted into a pleasure park and many summer cottages will be built. The altitude is nearly 2,000 ft. above the sea and nearly 1,000 above the level of the city. A. B. Hammond is Pres.; C. Markely, Vice-Pres., and O. L. Bottomley, Secy. and Treas.

WASHINGTON.—The Wheeler-Osgood Co., of Tacoma, Wash., will build a railroad up a steep mountain in Whatcom County to facilitate logging operations on a tract of cedar timber recently acquired.

ELECTRIC RAILWAYS.

NEW YORK, N. Y.—The Board of Estimate and Apportionment has granted a franchise to the New York & Queens County Railway Co. to operate passenger cars on two tracks of the Queensboro Bridge, as an extension to the existing lines in Queens. W. O. Wood, 7 Borden Ave., Long Island City, is Pres. and Gen. Mgr.

LEBANON, PA.—We are officially advised that the Ephrata & Lebanon St. Ry. Co. probably will let contracts for building its line about April 1, 1910. The line will be 23 miles long and will run from Ephrata to Clay, Hopeland, Kleinfelterville, Schaefferstown, Iowa and Lebanon. Preliminary survey has been made and right-of-way secured. S. T. Erb, Ephrata, is Pres.; F. H. Shaw is Ch. Engr., Lancaster, Pa. Noted on Oct. 21.

GREENSBURG, PA.—J. L. Fritsch, Ch. Engr. of the West Penn Rys. Co., Connellsville, Pa., informs us that construction contracts will be awarded early in the spring. The railway will be about ten miles in length and will extend from Greensburg to Jamison, No. 2, No. 3, No. 4 and New Alexandria Survey is in progress. Right-of-way is partly secured. W. S. Kuhn, 347 Fourth Ave., Pittsburg, is Pres. Noted on Oct. 21.

WILMINGTON, DEL.—We are officially informed that the West Chester & Wilmington Elec. Ry. Co. will let construction contracts about January, 1910. This railway will be about 15 miles long, connecting West Chester, Pa., and Wilmington, as noted on Oct. 28. Surveys are made, capital partly secured, and right-of-way obtained. St. G. H. Cooke is Ch. Engr. and Thos E. O'Connell is Pres., Delaware Trust Bldg., Wilmington.

HUNTINGTON, W. VA.—H. E. Matthews, Secy. of the Chamber of Commerce, advises us that the Commissioners of Huntington have granted to the Huntington Northern Railway Co. a franchise to use certain streets for an approach to a bridge which the railway company proposes to build over the Ohio River at this point. The estimated cost of the structure is about $2,000,000. About 35 miles of railroad will be built in Ohio to connect with the trunk lines running into northern territory. Col. Z. T. Vinson, of Huntington, is interested.

ROCK HILL, S. C.—A charter has been granted to the Carolina Traction Co., of Rock Hill, for an electric railway to be built from Rock Hill to Charlotte; another line from Rock Hill through Catawba, Lewisville, Landsford and Rossville townships to connect with the Seaboard Air Line Railway. Other branches may be built in any direction not more than 30 miles from Rock Hill. J. M. Cherry, of Rock Hill; W. S. Lee, of the Southern Power Co., and George Stephens, of the American Trust Co., of Charlotte, N. C., are the incorporators. Capital stock is $150,000, which may be increased to $500,000.

PROVIDENCE, KY.—The Kentucky Elec. Ry. Co. has plans under way, it is stated, for constructing its proposed railway which is to connect Providence, Nebo, Madisonville and Dawson, 22 miles. Power stations will be located at Dawson and Providence. Capital stock, $10,000, preliminary, to be increased to $300,000; bonds, authorized, $300,000. J. T. Edwards is Pres. and Gen. Mgr.; B. H. Roney, Treas., Providence; Ben Sisk, Silent Run, Vice-Pres.; R. D. Orsburn, Providence, Ch. Engr.; W. G. Roney, Providence, Secy.

COVINGTON, KY.—Preliminary steps toward the establishment of an interurban traction line from Covington to Big Bone Springs in Boone County, a distance of about 22 miles, have been taken and articles of incorporation of the Covington & Big Bone Railway Co. filed in the office of the County Clerk. The incorporators are M. J. Crouch, J. J. Weaver, J. W. Kennedy, Orlando P. Schmidt, R. S. Holmes, Louis Fritz, William Riedlin, Joseph Feltman and A. W. Koch. All of the incorporators are prominent business men of Covington.

COLUMBUS, OHIO.—The stockholders of the Findlay-Marion Ry. & Light Co. held a meeting on Nov. 5 in the Chamber of Commerce Bldg., Columbus, to consider plans for the construction of 46 miles of new track. They will organize a construction company for this purpose. The estimated cost of the work is $1,250,000 and the capital stock of the company, which now stands at $250,000, probably will be increased to that figure before long. The road will be of standard construction and built over a private right-of-way. When the road was planned two years ago, just before the panic, traffic arrangements had been completed with the C., D. & M. for an entrance into Columbus and with the Toledo, Bowling Green & Southern for entrance into Toledo. The present receivership of the C., D. & M. may interfere with this program.

FOSTORIA, OHIO.—The Fostoria & Tremont Ry. Co., proposes to commence construction soon on its electric railway, which is to extend from Fremont to Havens, Burgoon, Kansas, Amsden and Fostoria, a distance of 21½ miles. The company has purchased the Fremont City Street Railway, now in operation between Fremont and Ballville, 2½ miles, and will use it for an entrance to Fremont. It is intended to grade the line during the winter and complete it by July, 1910. Capital stock, authorized, $300,000. Bonds, authorized, $300,000. J. D. McDonel, Secy., Fostoria. Noted on Oct. 28.

CINCINNATI, OHIO.—The Cincinnati, Harrison & Indianapolis Traction Co. has been incorporated with $10,000 nominal capital to construct a traction road over the present tracks of the old Westwood Steam railway, through Westwood and Cheviot, and on to Harrison, Ohio, and eventually through to Indianapolis. A survey has been made as far as Harrison, and preliminary steps have been found favorable to the completion of the project. Arrangements have been entered into for the taking over of the old steam road, which practically has been inoperative for some years. The consideration has not been given out. The road has six miles of track from Brighton to Cheviot, and the extension of a traction system to Harrison would mean the laying of 14 miles of additional track. The proposed line will run through Dent, Bridgetown, Miamitown and Mount Hope, also. A. K. Nippert, First National Bank Bldg., Cincinnati, Charles E. Roth, Rose Hill Ave., Avondale, Ohio, and Will L. Finch, Harrison Park, Cincinnati, are among those interested in the proposed road.

SOUTH BEND, IND.—The TRIAD CONSTRUCTION CO., Goshen, Ind., has secured a contract for the grading of the South Bend & Logansport interurban line.

WELLMAN, IOWA.—At a recent mass-meeting citizens raised $25,000 for the Ottumwa-Iowa City Interurban Ry., and right-of-way for three miles was secured on each side of Wellman. At Reota the same company secured $60,000 with five miles of right-of-way on each side. Frank Tanner, of Iowa City, is interested. The company is chartered under the laws of South Dakota.

DES MOINES, IOWA.—We are officially informed that negotiations between the city of Des Moines and the syndicate represented by Congressman Wm. B. McKinley, of Illinois, for the purchase of the street railway properties and franchise, have fallen through. The parties were unabel to agree as to certain points among which are: the amount of capitalization to be allowed; the right of the city to demand a certain quality of service; the duration of the franchise. (State laws place the limit at 25 years.) The basis for purchase by the city at specified periods; the providing of interurban terminals by the company. One or two parties have signified an intention to make the city a proposition, but nothing definite has been done. The present system is in a very dilapidated condition, the franchise has expired, and the citizens are inclined to grant a liberal franchise to anyone who will guarantee adequate service.

SIOUX FALLS, S. DAK.—The South Dakota Interurban Ry. Co., proposes to build an interurban railway from Sioux Falls to Bijou Hills, 160 miles. Survey has been made as far as Parkston, which has donated $50,000 toward the enterprise. The right-of-way has been secured as far as Freeman, and fully a third of the money required to promote the enterprise has already been subscribed, it is stated. W. E. Miller is Pres., Centerville, S. Dak.

CORPUS CHRISTI, TEX.—The Corpus Christi Street & Interurban Railway Co. has filed its charter. Capital, $100,000. Incorporators are Daniel Hewitt and V. S. Heinley, of Corpus Christi, Tex.; and Earl C. Heinley, of Colorado City, Colo.

LAWTON, OKLA.—The Lawton & Fort Sill Elec. Ry. Co. will let contracts this month for building this line from Lawton, Okla., north via Fort Sill to Medicine park. There will also be twelve miles of street railway in Lawton. The work will include erection of a 30-ft. steel or concrete bridge. Simon Smith is Pres., and Moore & McClure, Engrs., Oklahoma City. Noted on Oct. 28.

ENID, OKLA.—We are officially advised that the Enid & Central Oklahoma Traction Co. will let contracts in about 60 days for construction work. The line will connect Enid and El Reno, 65 miles. Surveys have been made and capital for construction obtained. Right-of-way is partly secured. There will be two bridges of 100 ft. spans and one 900-ft. bridge. W. S. Whittinghill is Pres. and H. S. Moreland is Ch. Engr., Enid. Noted on Oct. 14.

OKLAHOMA CITY, OKLA.—The Oklahoma City & Surburban Ry. Co., expects to build about 25 miles of new city and suburban track within the next six months. Contracts for this work probably will be placed soon. As noted on Sept. 9, this company was incorporated for the purpose of constructing four interurban railways, the main route to extend from Britton to Edmond and Oklahoma City to Moore, 32 miles in length. The main terminus will be at 13th St. and Santa Fe Ave., Oklahoma City. From this point one branch will extend east two miles and northwesterly two miles; another branch will extend from Main and Pennsylvania Aves. northwesterly for three miles. Branch offices will be located at Pittsburg, Pa., and New York, N. Y. Capital stock, $250,000. Incorporators: Charles W. Ford, Supt. of the Oklahoma Railway; J. J. Johnson, Fred S. Combs, W. A. Haller and Richard Durrett, all of Oklahoma City. Mr. Haller is Gen. Mgr.

SEATTLE, WASH.—The Independent-Seattle-Tacoma Electric Railway Co. has been organized with F. K. Burch, Pres.; Edward Nicholas Chase, Vice-Pres.; Isaac Calhoun, of Kent, Secy., and R. R. Spencer, of Seattle, Treas., to start a canvas for raising $1,000,000 for the construction of an interurban railway line. C. D. Hillman is chairman of the executive committee.

SPOKANE, WASH.—The Columbia River & Mt. Adams R. R. Co., has been incorporated to build an electric railroad from some point on the Columbia River in Klickitat County, northerly through parts of Klickitat, Yakima and Skamania Counties to a point in the vicinity of Mt. Adams. The company also plans to operate steamboats and ferries on the Columbia River, and to generate electric current for light and power purposes. Capital stock, $2,000,000. Trustees: Adolph F. Suksdorf, Edward H. Suksdorf and Oswald N. Suksdorf, all of Spokane.

SAN DIEGO, CAL.—The Keller-Kerckhoff Co. has secured practically all the right-of-way, for its proposed electric railway, between San Diego and Del Mar, Cal. A bond of $50,000 has been given by the company, which has agreed to complete the road, by June, 1911.

BOISE, IDAHO.—The Gooding, Soldier & Boise Interurban Co. has been incorporated to build a railway, steam or electric, to extend between Boise and Gooding, a distance of 34 miles, to connect with the Idaho Southern Railroad. Preparations are being made for grading and construction of a portion of the proposed railway as far as Soldier. Capital stock, $1,000,000.

LONDON, ONT.—London & Lake Erie Railway & Transportation Co. has made application for incorporation, as the successor to the Southwestern Traction Co. Permission has also been asked to acquire the Woodstock, Thames Valley & Ingersoll Electric Railway as part of its through system, and to construct lines from Brantford, through Paris to Woodstock, Ingersoll, London, Strathroy and Glencoe, and from Delaware to Lambeth and from Ayler to St. Thomas. The new company will also run a line of boats to Cleveland, Ohio, from Port Stanley on Lake Erie. Capital stock, $2,000,000. Provisional directors: W. K. George, Sidney Jones and George B. Woods, Toronto; Dr. Angus MacKay, Ingersoll; F. G. Rumball and John Purdom, London; and Albert E. Thompson, Cleveland. The Southwestern Traction Co., was noted on Oct. 7.

VANCOUVER, B. C.—The British Columbia Electric Ry. Co., Ltd., will let contracts soon for building 2½ miles of single-track from North Vancouver, B. C., up the Lynn Valley, also for seven miles of suburban line from Vancouver through Burnaby municipality. The lines will reach timber lands and work is to be started as soon as contracts are let. W. B. Bunbury is Mgr., North Vancouver.

LIGHT AND POWER PLANTS.

(* *denotes that this work is advertised in Engineering News.*)

PORTLAND, ME.—Contract has been awarded by the County Commissioners, J. H. McDonald, Chn., for special electric fixtures for the new county building to the McKENNEY & WATERBURY CO., 181 Franklin St., Boston, Mass., at $13,342. George Burnham, 120 Exchange St., is Arch.

MARBLEHEAD, MASS.—The citizens on Oct. 29 voted to appropriate $30,000 for the reconstruction of the municipal electric light plant.

COLCHESTER, CONN.—Plans are being considered by the National Shoe Supply Co. for the installation of an electric plant to furnish electricity for lighting its works.

PORTLAND, CONN.—Plans are being made by the Rogers & Hubbard Co. to install electric light and gas lighting systems in its plant, recently erected. The equipment of the electric plant will include a generator, already purchased, and two 60 HP. gas engines and a 10 HP. steam engine.

NEW YORK, N. Y.—Bids were received as follows by Nicholas J. Hayes, Fire Comr., on Nov. 15, for furnishing all the labor and materials required for additions and alterations to heating and power plant in the Fire Department repair shops building, northeast corner of 56th St. and Twelfth Ave., Boro. Manhattan: James Curran Mfg. Co., 512 East 36th St., New York, $8,700; Blake Williams, 200 W. 21st St., New York, $12,522; Frank Dobson Co., Inc., 319 East 53rd St., New York, $11,600; Baldwin Engineering Co., 209 W. 33rd St., New York, $9,189; E. Rutzler & Co., 127 White St., New York, $9,162.

OSWEGO, N. Y.—Bids will be received by the Board of Public Works until Nov. 23 for lighting the streets and public buildings for five years. Present contract expires on Feb. 20, 1910.

HAILESBORO, N. Y.—The Oswegatchie Light & Power Co. will erect a large electrical power plant on the site of the mill No. 5 here in the spring. S. G. Hunter is Supt. and Ch. Elecn., Gouverneur, N. Y.

*ORANGE, N. J.—We are officially advised that bids were opened by the Common Council on Nov. 8 for constructing the municipal electric light plant according to plans of Runyan & Carey, 122 Market St., Newark, as follows: (a) general construction, (b) additional for underground construction on Main St.: Lord Electric Co., 213 West 40th St., New York, (a) $97,897, (b) $13,442; William Sheehan & Co., 136 Liberty St., New York, (a) $92,000, (b) $11,664; L. K. Comstock & Co., 50 Church St., New York, (a) $91,400, (b) $12,920; E. J. Duggan & Co., 1133 Broadway, New York, (a) $90,400, (b) $9,300; Storms & Co., Newark, N. J., (a) $87,639, (b) $13,900.

COLUMBIA, N. J.—The Easton Consolidated Service Corporation, it is reported, has consolidated with the Eastern Pennsylvania Power Co., which was recently incorporated with a capital stock of $2,000,000. The last named company is constructing a large hydroelectric plant.

NEWARK, N. J.—The Board of County Freeholders on Nov. 5 awarded to STORMS & CO. of Newark, contract for the installation of an electric light plant at the jail at $10,478.

BRIDGETON, N. J.—Contract for lighting the streets for five years has been awarded to the BRIDGETON ELECTRIC CO., William H. Myers, Ch. Elecn., at $10,100 per year.

EVANS CITY, PA.—The Evans City Light, Heat & Power Co., has been organized here for the purpose of constructing an electric power plant to furnish electricity for all purposes. The headquarters of the company will be in Elwood City. Samuel A. Roelofs, of Elwood City, is interested.

WAYNESBORO, PA.—The Waynesboro Gas Light Co. will erect a large new plant, triple its output and greatly increase its facilities during the next few months.

WILKES-BARRE, PA.—The Lehigh Coal & Navigation Co. plan to erect a large power plant on Broad Mountain soon.

FORT DU PONT (Delaware City Post-Office), DEL.—Bids have been opened as follows by Lieut. E. A. Stockton, Constructing Q. M., U. S. A., for furnishing all poles, wires, fixtures, etc. necessary to light the post by electricity: T. E. Newbery Electric Co., St. Louis, Mo., Item 1, $7,156; Item 2, $6,205; Item 3, $2,652; M. E. Foster Electric Co., New York, Item 1, $5,670; Item 2, $6,944; Item 3, $2,600; R. E. Moore Co., Wilmington, Del., Item 1, $8,[illegible], with Gem lamps, and $8,300, without Gem lamps; McCay Engineering Co., Baltimore, Md., Item 1, $5,975; Item 2, $5,36[illegible]; Item 3, $2,820; if awarded all the work would deduct $200 from Item 1 and $100 from Item 3; Carroll Electric Co., Washington, D. C., Item 1, $7,000; J. F. Buchanan Co., Philadelphia, Item 1, $9,737; Item 2, $5,555; Item 3, $2,525; D'Oliver Engineering Co., Philadelphia, Item 1, $10,850; Item 2, $7,288; Item 3, $3,351; will accept all three items for $19,965, or Items 1 and 2 for $16,944; A. D. Granger Co., New York, Item 1, $5,073; Item 2, $5,694; Item 3, $2,775; will accept all three items for $13,168, or items 1 and 2 for $10,454; H. C. Clark, Delaware City, Item 1, $9,686; Item 2, $10,437; Item 3, $2,759; West Jersey Electrical & Construction Co., Camden, N. J., Item 1, $8,157; Item 2, $9,160; Item 3, $3,731; if awarded all work will make a discount of 5% on Items 1 and 2; Strang Electric Co., Philadelphia, Item 1, $7,791; Item 2, $9,318; Item 3, $3,213; Westinghouse Electric & Manufacturing Co., E. Pittsburg, Pa., Item 3 only, $2,490. The lowest bids were those of A. D. Granger Co., 90 West St., at $10,454, for Items 1 and 2 consolidated and Westinghouse Electric Mfg. Co., for Item 3 at $2,490.

POCOMOKE, MD.—Plans for the construction of an electric light plant here are being prepared by Theodore W. P. Pitesch, of Baltimore, Md.

GREER, S. C.—The City Council is contemplating awarding contract to the Southern Power Co. for supplying electricity for lighting the streets and public buildings, or erecting a municipal plant.

WAYCROSS, GA.—Application has been made to the City Council for a franchise to furnish electricity for lamps and gas for fuel in Waycross, by Burdette Loomis, Pres. Waycross Gas & Construction Co. It is reported that the company has made arrangements for financing the construction of a wood-distilling plant, to cost $500,000, to be located in the pine belt, between Savannah and Jacksonville. The company proposes to utilize large quantities of refuse wood for generating electricity and fuel gas.

ALEXANDRIA, LA.—Bids will be received about Dec. 5 for new work at the electric light plant and water works. Estimated cost, about $40,000. I. W. Sylvester, is City Engr.

COLUMBUS, OHIO.—Bids will be received until Dec. 10 by the Board Managers Ohio Penitentiary, George U. Marvin, Secy., Columbus, for power equipment, as follows. separate contracts to be let on various classes of equipment: Two direct-connected units, consisting of alternating current generators and cross-compound Corliss engines; two turbo-generators; two boiler-feed pumps; a water-feed heater; one electric traveling crane, four automatic stokers. Marriott & Allen, of Columbus, are Archs.; Osborn Engineering Co., of Cleveland, are Engrs.

LORAIN, OHIO.—The City Council has voted to appropriate $6,000 for the purchase of a new engine and generator, switchboard, etc., for the municipal electric light plant.

SPRINGFIELD, OHIO.—The American Seeding Machine Co. contemplates increasing the output of its power house and will install a generating unit with a rating of 300 HP.

BRAZIL, IND.—The Vigo County Electric Co., which recently secured control of the plant of the Brazil Electric Light Co. here, has been granted a franchise by the County Commissioners to erect a high-tension transmission line through the county. The company plans to erect a transmission line to Greencastle, Ind., to furnish electricity for lamps and motors in that city. Work on the line will commence at once.

ROANOKE, IND.—The FORT WAYNE & WABASH VALLEY TRACTION CO. has been awarded contract by the Town Board to furnish electricity for lighting the streets of the town. Lamps of the Wood magnetic type will be installed. C. G. Guild is Supt. Light & Power Dept.

ECORSE, MICH.—C. E. Haight, owner of the local electric light plant, has offered a bid to the Village Council for lighting the streets of the village by electricity. At present gas is used at a cost of $1,000 per year.

BAY CITY, MICH.—The Eastern Michigan Power Co. has purchased the property of the New York Salt Works, south of the Interurban bridge, on which it plans to erect a substation for the distribution of electricity in the Saginaw Valley cities. The company will locate its first dam on the Au Sable River in what is known as "Cooke's" in Iosco County, about 14 miles above Au Sable. This dam will develop from 3,500 to 4,000 HP. Cost of dam, power plant and transmission lines, $500,000. Electricity generated at the plant will be transmitted to Bay City, Saginaw, Flint, Lapeer, Owosso, Flushing and to cities in other parts of the state.

CLINTON, ILL.—The City Council is considering an ordinance to issue $20,000 of bonds for the construction of an electric light plant and water works system. L. W. Lemon is City Engr.

MADISON, WIS.—The Wisconsin Capitol Commission, Lew F. Porter, Secy., has awarded contract for conduits and piping for central heating station and tunnel to J. R. KEHN CO., 57 N. State St., Chicago, Ill., at $66,700.

GRAND RAPIDS, WIS.—The Dells Paper & Pulp Co. of Eau Claire, Wis., has awarded general contract for the construction of a power dam at Jim Falls, Chippewa River, to W. E. ULE & CO., of Grand Rapids, Wis. Dam will be 850 ft. long, with 50-ft. head.

BETTENDORF (DAVENPORT oost-office), IOWA.—THE BETTENDORF AXLE CO. has been awarded contract for furnishing power for operating the plant of the Bettendorf Improvement Co., which proposes to furnish electricity for lighting the town.

DES MOINES, IOWA.—Bids will be received by the City Council at the office of George F. Poorman, City Clk., until Dec. 1, for the construction of a city hall, including heating, electrical work and plumbing, as per plans and specifications now on file at the office of the City Clerk.

KENSETT, IOWA.—The directors of the Kensett Mill & Light Co., have decided to enlarge and improve the electric plant. New generator is to be installed.

MARION, KAN.—Plans are being prepared by Burns & McDonnell, Consulting Engrs., Scarritt Bldg., Kansas City, Mo., for an electric light plant and water-works system here. Estimated cost of electric plant, $12,000; water works, $48,000. Bids for the construction of the plant will be asked soon. Thomas W. Bowen is City Clk.

ERIE, KAN.—See item under Water Supply-Irrigation.

VALENTINE, NEB.—Bids are asked until 1 p. m., Nov. 29, by the Village Clk., for the construction of the whole or parts of the water and lighting systems, including the furnishing and installing of all machinery and apparatus. W. K. Palmer Co., Dwight Bldg., Kansas City, Mo., are Engrs.

SPRINGFIELD, S. DAK.—Bids will be received until Nov. 25 by Regents of Education, of the State School of South Dakota, A. E. Hitchcock, Chn., at Mitchell, for furnishing and installing electric equipment for an electric lighting plant at the State Normal School here.

NASHVILLE, ARK.—B. H. Rainwater, of Junction City, Ark., is contemplating installing an electric light plant here.

SUPPLY, OKLA.—Bids will be received by the State Board of Public Affairs, Guthrie, Okla., T. A. Chandler, Acting Secy., until Nov. 22 for the installation of a heating and power plant at the Hospital for Insane here. P. H. Weathers, Arch., Guthrie. Plans and specifications may be seen at the office of E. G. Newell, Supt., Supply; State Board of Public Affairs and Architect of State Board, Guthrie. Bidders are asked to include a proposal for a 2-ton ice plant to be installed in the same building, plans for which shall accompany bids.

OKLAHOMA CITY, OKLA.—On Oct. 29, the citizens voted to grant the Oklahoma Gas & Electric Co. two 21-year franchises, under the terms of which the city will have the right to purchase the lighting plant any time within four years of their expiration.

STILLWELL, OKLA.—See item under Water Supply-Irrigation.

FORT LOGAN, COLO.—See item under Water Supply-Irrigation.

CEDAR, COLO.—Plans have been filed with the State Engineer for the Custer reservoir in San Miguel and Dolores Counties, work on construction of which was commenced in October. The dam will be 110 ft. in height and will create a storage capacity of 756,800 cu. ft. of water. The water will be used for the development of power and for irrigation purposes. M. J. Bailey, of Cedar, is interested in the project. Estimated cost, $200,000.

LAMAR, COLO.—The Lamar Electric Co., J. R. Wade, Ch. Elecn., is contemplating the extension of its transmission lines.

DENVER, COLO.—The Williamson-Haffner Engraving Co., 1633 Arapahoe St., Denver, is having plans and specifications prepared for a new building, 225 by 125 ft., 2-story, fireproof construction and sprinkled, to be equipped to be operated by electricity. A 2,200-volt motor will drive a 110-volt, direct-current generator and individual motor drive will be utilized throughout. The motor arrangements include enclosed type motors and geared connections. The building will be lighted by a system of tungsten lamps planned by the illuminating engineer of the Denver Gas & Electric Co.

JUNCTION CITY, ORE.—The Northwestern Gas & Electric Co., successor to the Willamette Valley Co., has purchased the electric plant in Junction City, owned by the Howard Electric Co., and may soon establish a 24-hour service.

OAKLAND, CAL.—The City Council has granted the Great Western Power Co., Crocker Bldg., San Francisco, a franchise to erect transmission lines in Oakland for the distribution of electricity for lamps, heat and motors. C. Hudson, Sacramento, is Supt. Trans.

LEASTALK, CAL.—The Garavanza Mining & Milling Co. of Leastalk, is contemplating the construction of a new power plant.

REDLANDS, CAL.—The Holton Power Co., it is stated, is planning to increase the equipment of its power plant, including a hydraulic turbine unit of 1,000 HP. transforming apparatus, etc.

GENESEE, CAL.—The construction of an electric power plant and concentrating mill is being considered by the Five Bears Mining Co. here.

YOUNTVILLE, CAL.—The directors of the Veterans' Home have contracted with the SNOW MOUNTAIN POWER CO. to furnish electricity to the institution for lamps and motors.

PARKER, ARIZ.—The Arizona Empire Copper Mines Co. contemplates the installation of a power plant, the equipment to include an engine, generator, motors, air compressor and ore reduction machinery.

*WHIPPLE BARRACKS (Prescott post-office), ARIZ.—We are officially advised that bids were received by First Lieut. William A. Alfonte, Construction Q. M., U. S. A., on Nov. 10, for furnishing labor and material required for the construction of an electric lighting system at Whipple Barracks. The bids follow: F. E. Newbery & Co., Century Bldg., St. Louis, Mo., $14,790; Central Electric Co., Inc., 185 Stevenson St., San Francisco, Cal., $12,795; Westinghouse Electric & Mfg. Co., Continental Bldg., Baltimore, Md., for fitting up substation and furnishing watt meters only, $2,100.

RENO, NEV.—The Reno Power, Light & Water Co., George Campbell, Mgr., is reported to have decided to construct a plant on Truckee River west of here. Estimated cost, about $1,000,000.

SANDPOINT, IDAHO.—The Idaho Power & Concentrating Co. has completed plans for its proposed construction work next spring. Contracts will be awarded at once for the construction of dams and flumes on Trestle Creek. Estimated cost, $12,000.

BRANTFORD, ONT.—The Western Counties Electric Co., 12 South Market St., has had plans prepared for the erection of a new transformer station on Murray St. Estimated cost, $4,500.

BRACEBRIDGE, ONT.—We are officially advised that contracts were let on Nov. 9 by the town for complete power plant including 650 KW. generator, water-wheels, and all equipment including dam, etc., to CANADIAN CONTRACTS, LTD.

Contracts for hydraulic division and electrical work were awarded to WILLIAM KENNEDY & SONS, and the CANADIAN GENERAL ELECTRIC CO., respectively. C. H. & P. H. Mitchell are Designing Engrs., Toronto, Ont.

LACOMBE, ALTA.—The town has purchased the plant of the Blindman River Electric Power Co., and will proceed at once to repair the dam on the river and install a steam auxiliary plant in the town.

CALGARY, ALTA.—The Calgary Power & Transmission Co., has awarded contract for general work to the WALKER-FYSHE CO., of Montreal. Smith, Kerry & Chace, Toronto, Ont., are Consulting Engrs.

NEW WESTMINSTER, B. C.—The British Columbia Electric R. R. Co., has awarded contract for the five substations along its electric line to Chilliwac, to T. R. NICKSON & CO., of Chilliwac, at $250,000.

SONORA, MEX.—The Pacific Smelting & Mining Co. of Mexico City, Mexico, has taken over several mines here. The new company will install two units at a cost of $35,000 each, to their smelting plant at Fundicion.

BRIDGES.

(* *denotes that this work is advertised in Engineering News.*)

ATHOL, MASS.—The citizens have voted to erect an arch bridge of concrete over Exchange St. Estimated cost, $8,000.

NEW YORK, N. Y.—We are officially advised that contracts have been awarded to the DUNSEATH ENGINEERING CO., INC., 114 Liberty St., New York, as follows: For the Scherzer Rolling Lift bridge for the Long Island R. R. over Dutch Kills Creek from the Penn Bridge Co.; for the Hunters Point Ave. Scherzer Rolling Lift bridge for the city of New York from the Northeastern Construction Co.

RENSSELAER, N. Y.—Plans and specifications for a bridge to be constructed by the New York Central & Hudson River R. R. Co., over Columbia Turnpike in the city of Rensselaer, have just been approved by the Common Council. The structure will be 122 ft. long and 10 ft. wide, and will cross six railroad tracks shortly to be laid. The company will begin the work of erecting the bridge at once.

JERSEY CITY, N. J.—Bids were received as follows on Nov. 9 by the Boards of Chosen Freeholders of Essex and Hudson Counties, at Jersey City, for constructing a bridge on the Newark plankroad over the Passaic River. Snare & Triest, 143 Liberty St., New York, $333,000 and $338,000; A. E. Sanford, $344,000 and $367,000; F. P. Long, $349,000 and $360,000; F. M. Stillman Co., $341,000 and $345,350.

SOMERS POINT, N. J.—The Bridge Committee of the Boards of Chosen Freeholders of Atlantic and Cape May Counties have instructed their engineers to draw plans and specifications for a 30-ft. wide bridge across Great Egg Harbor Bay, from Somers Point to Beasley's Point, wholly independent of any railroad. The plans are to be ready by the December meeting of the boards.

PHILADELPHIA, PA.—The City Council has passed a bill, it is stated, providing for the construction of a bridge on the line of Vissahickon Ave. over the Richmond branch of Philadelphia & Reading Ry. Estimated cost, $45,000.

*MONONGAHELA CITY, PA.—Bids will be received until noon, Dec. 6, at a joint meeting of the County Commissioners of Allegheny and Washington Counties and Controller of Allegheny County in the office of the latter at Pittsburg for the removal of the superstructure and sub-structure of the old bridge across the Monongahela River here. R. J. Cunningham is County Controller.

STOWE, PA.—The O'HEARN CO., Pittsburg, was awarded contract on Nov. 8 for the construction of the new bridge over Span Run in Stowe Township at $9,248.

CLEARFIELD, PA.—Bids will be received by the Commissioners of Clearfield County until noon, Nov. 20, for replanking the floor of Bower bridge in Greenwood Township, and placing new girders under the same, space to be replanked 132 ft. in length and 16 ft. in width with 2-in. oak lumber not less than 8 ins. or more than 12 ins. wide; 72 oak girders 2x12x16 ins., inclusive of all labor and material necessary to said contract. L. C. Norris is Clk.

CUMBERLAND, VA.—We are officially advised that the Roanoke Bridge Co., Roanoke, Va., submitted the lowest bid to the State Highway Commission on Nov. 13 for the construction of a steel bridge near Flanagan's Mills, Cumberland County, P. St. J. Wilson is State Highway Comr.

HUNTINGTON, W. VA.—A franchise was granted on Nov. 9 by the city to the Huntington & Northern Ry. Co. to construct a bridge across the Ohio River here. Estimated cost, about $3,000,000. See item under Electric Railways.

WINSTON-SALEM, N. C.—Winston-Salem Southbound R. R., O. H. P. Cornell, Ch. Engr., Winston-Salem, will soon begin the construction a steel bridge across the Yadkin River. The structure will have ten piers and two abutments. SCOTT BROS., Lynchburg, Va., have contract for concrete work. L. M. Williams, Lynchburg, Va., will superintend construction.

MOBILE, ALA.—The Pensacola, Mobile & New Orleans R.R., Henry McLaughlin, Pres., will construct bridge to connect Baldwin County and Mobile.

GADSDEN, ALA.—The city has awarded contract to W. A. FERRET, Birmingham, Ala., to construct a concrete bridge across Town Creek at Fourth St.

LONG BEACH, MISS.—The Gulfport & Mississippi Traction Co., J. T. Jones, Pres., contemplates the erection of several small bridges in connection with the railway from Long Beach to Pass Christian, Miss.

MAGNOLIA, MISS.—Contract for constructing a steel span bridge over Tangipahoa River near Osyka bids opened on Nov. 1, has been awarded by the County Supervisors to E. P. AYLESBURY & SON, of New Orleans, La., at $2,021.

VICKSBURG, MISS.—The Vicksburg Electric Ry. Co., S. S. Bullis, Pres., Vicksburg, and Alabama & Vicksburg Ry., D. D. Curran, Pres., New Orleans, La., contemplate the construction of a viaduct. Estimated cost, $40,000.

TALLULAH, LA.—Contract for constructing a bridge over Roundaway Bayou, bids opened on Nov. 3, has been awarded by the Police Jury to W. T. YOUNG BRIDGE CO., of Nashville, Tenn.

BELLEVUE, KY.—The citizens have voted to issue $8,000 of bonds for repairing the Taylor creek culvert.

*CINCINNATI, OHIO.—Bids are asked by the Board and Director of Public Service until noon, Dec. 6, for superstructure and substructure work of lift bridge at Mohawk Pl. over the Miami and Erie Canal in connection with the remodeling of the adjoining streets and sidewalks. John T. Wenner is Clk.

HUNTINGTON, IND.—L. A. SHUTT, of Huntington, has been awarded contract for the construction of a 115-ft. bridge over the Salamonie River, known as the Murphy bridge, at $4,300, or $700 under the appropriation. The contract calls for two 60-ft. spans of concrete.

LOGANSPORT, IND.—See item under Streets and Roads.

QUINCY, ILL.—The Board of Public Works has let contract to ROEDER & GREEMANN for constructing 400 ft. of an 8-ft. stone arch culvert on Front St., between Washington and Jefferson Sts. John A. Berlin is City Clk.

STREATOR, ILL.—R. M. Modjeski, Monadnock Bldg., Chicago, has been engaged to prepare plans and specifications for a bridge here. Estimated cost, $40,000. F. W. Herbert, Cy. Engr.

CHICAGO, ILL.—The Chicago & Western Indiana R. R. Co., has let contract to the AMERICAN BRIDGE CO., 115 Adams St., Chicago, for the construction of a concrete and steel bascule bridge, 16 × 186 ft. The Strauss Bascule & Concrete Bridge Co., are Engrs., 134 Monroe St., Chicago.

KAPPA, ILL.—All bids were rejected on Nov. 9 by the Road and Bridge Committees of the Boards of Supervisors of McLean and Woodford Counties, for the construction of a bridge over the Mackinaw River, near here, bridge to consist of three spans, the main one 180 ft., the north and south spans each 800 ft. The main span to rest on steel tubes 25 ft. long and 4 ft. thick. The north and south spans to rest on concrete abutments 20 ft. high and 5 ft. wide at the bottom and 3 ft. at the top. New bids are asked until Dec. 2.

MILWAUKEE, WIS.—The Board of Public Works awarded contract on Nov. 8 for constructing a steel bascule bridge across the Milwaukee River connecting Michigan and Sycamore Sts., to C. H. STARKE DREDGE & DOCK CO., Arthur H. Vogel, Secy., of Milwaukee, at $112,473. The bridge will be 197 ft. long, with 40-ft. roadway and sidewalks 11 ft. 6 in. wide, to be completed by Sept. 1, 1910. The next nearest bid was that of the Milwaukee Bridge Co., at $115,088. Other bidders were: J. E. Hathaway, $119,790; National Construction Co., $134,000.

SIOUX CITY, IOWA.—Contract for constructing a plate girder bridge over Perry Creek at 16th and Hamilton Sts., bids opened on Nov. 2, has been awarded by the city to LEWIS & LEEDER, of Sioux City. The city furnishes the plate girders; contractor erects and furnishes floor system and abutments. A. Y. Skeels is City Engr.

BURLINGTON, IOWA.—Contracts for repairing the Cascade Bridge, bids opened on Nov. 1, has been awarded by the city to the CLINTON BRIDGE CO., of Clinton, Ill., at $9,000. J. Winters is City Engr.

MINNEAPOLIS, MINN.—A concrete bridge across the St. Croix River near the Dalles was ordered on Nov. 5 by the Interstate Park Commission. The order is contingent upon the contribution of the villages of Taylors Falls and St. Croix Falls of $3,500 each, which, with the $3,500 appropriated by both Minnesota and Wisconsin, will provide $14,000.

GREAT FALLS, MONT.—The Board of Commissioners of Cascade County has awarded contract to the CENTRAL STATES BRIDGE CO., Indianapolis, Ind., at $9,138, for the construction of five steel highway bridges. David M. Wood is County Clk.

DALLAS, TEX.—J. M. Preston, City Engr., has prepared plans and specifications for the construction of a steel reinforced concrete bridge over Turtle creek on Cedar Springs St. Estimated cost, $7,000.

GUTHRIE, OKLA.—The Achison, Topeka & Santa Fe. R. R. Co., W. B. Storey, Jr., Ch. Engr., Chicago, Ill., contemplates constructing a viaduct at Cleveland Ave.

GRAND JUNCTION, COLO.—The County Commissioners on Nov. 4, appropriated $25,000 toward the erection of a bridge over the Grand River at Main St. Estimated cost, $40,000.

ALBUQUERQUE, N. MEX.—Bids are asked until 10 a. m., Nov. 20, by the Board of County Commissioners, A. E. Walker, Clk., for the construction of two steel bridges across the Rio Grande River in Bernalillo County.

SPOKANE, WASH.—The city proposes to construct a reinforced concrete viaduct about 2,000 ft. long over the railroad tracks at Divison St. T. C. Ralston is City Engr.

SEATTLE, WASH.—The city contemplates the construction of a bridge to connect Seattle with West Seattle over W. Railroad Ave. Nothing definite has as yet been done. R. H. Thomas is City Engr.

SAN JOSE, CAL.—The Board of Supervisors of Santa Clara County has awarded contracts for constructing culverts, as follows: Portland Ave., to JOHN DOYLE; Fremont Ave., to JAMES CASLEY. Henry M. Ayer is Chn.

AZURA, CAL.—The Board of Trustees will advertise for bids shortly, for the construction of a cement bridge with reinforced concrete piers, and buttresses. Estimated cost, is $5,000.

LOS ANGELES, CAL.—The city has awarded to the UNION IRON WORKS of Los Angeles, contract for the construction of a reinforced concrete bridge 968 ft. in length and 70 ft. wide, across the Los Angeles River, extending from Buena Vista St., to East Buena Vista St., work to be completed within 18 months, beginning Nov. 1, 1909.

DUNCAN, ARIZ.—Bids will be received by the Board of Supervisors of Graham County until noon, Nov. 30, for the construction of a steel and concrete bridge. L. F. Vaughn is County Clk.

PHOENIX, ARIZ.—Only one bid was received on Nov. 6 by the Board of Supervisors for the construction of a bridge across the Salt River at Center St. The bid was that of the Newton Engineering Co., at $88,000, for bridge of arched spans. As it was informal the Supervisors rejected it. New bids are asked until Dec. 6. Mayberry & Parker are Engrs.

ARTHABASKA, QUE.—Bids are asked until Dec. 9, by Louis Lavergne, Secy.-Treas. Council of County of Arthabaska, for the construction of a steel bridge on the Becancour River between the municipalities of St. Louis of Blandford and the township of Stanfold.

BUILDINGS.

(* *denotes that this work is advertised in Engineering News.*)

RUTLAND, VT.—Bids are asked until Nov. 24, by the Building Committee for the proposed Shrine temple, which, in addition to providing Cairo temple, Ancient Arabic Order Nobles of the Mystic Shrine, with a home, will contain an opera house which will accommodate 1,800 people, a banquet hall with a capacity of 600. The temple will stand on Wales St., with a main entrance facing that thoroughfare and the main auditorium standing behind the present Masonic temple on Washington St. The front of the building on Wales St. will be finished in Egyptian and Moorish architecture. It will be of dark brown pressed brick and the trimmings will be in terracotta. The building will be fireproof. The sashes for the doors and windows will be of steel, wired glass and steel lath will be used, and as little wood as possible. Frank Lyman Austin, of Burlington, Vt., is Arch.

SPRINGFIELD, MASS.—We are officially advised that a 2-story fireproof garage building will be erected by William J. Hyland, at 34 Sanford St., where the office of the Annable Lumber Co. was formerly. The building will be of brick and concrete and will be built heavy enough to permit putting on four stories more later. The building will be leased to the Morse-Readio Co. There will be an entrance from East Court St., from which there is a 20-ft. right-of-way to the property on which the new garage will stand. The structure will be 80 ft. on Sanford St., and 90 ft. deep. It will accommodate 35 cars and will leave space enough through the middle for two cars to stand abreast. The second floor of the building will be occupied as a machine and repair shop. Bids will be received about Dec. 1. George R. Pyne, 31 Elm St., Springfield, Mass., is Arch.

WORCESTER, MASS.—We are officially advised that the Palace Auto Station, Inc., will erect a fireproof garage at Worcester. The building will be two stories high, 72 × 149 ft. Joseph C. Schaeffler & Co., 73 Tremont St., Boston, and 151 West 91st St., New York, are Archs. and Engrs. Pumps, turntables, etc., will be needed. Contract will be let about Nov. 25.

NEW HAVEN, CONN.—Bids were received as follows on Nov. 15 by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of an extension to the New Haven post-office: William H. Fissell, St. James Bldg., New York, $44,973; Conroy Bros., New York, 217 West 125th St., $42,375; Wills & Marvin Co., 1170 Broadway, New York, $48,712; M. P. Wells, Philadelphia, $47,971; Connors Bros. Co., Lowell, Mass., $52,300. Nov 1, 1910.

LAKE GEORGE, N. Y.—It is stated that the proposed Fort William Henry Hotel, for which Ludlow & Peabody, Archs., 12 West 31st St., New York, have plans, will cost approximately $250,000. It will be fireproof and the construction will be of steel, concrete and possibly brick. The present plans call for a 4-story building shaped like the main portion of the old hotel. C. S. Sims, of Albany, N. Y., is the Gen. Mgr. of the hotel.

NEW YORK, N. Y.—Bids are asked by Nicholas J. Hayes, Fire Comr., until 10.30 a. m., Nov. 23, for furnishing all the labor and materials required for additions and alterations to quarters of Engine Company 201, situated at 190 Butler Ave., corner of Eureka Pl., and quarters of Hook and Ladder Company 101, located on Broadway, near Main St., Tottenville, Boro. of Richmond.

On Nov. 8 the Fifth Avenue Baptist Church decided upon the plans of a $400,000 church and ordered a committee to proceed with the details of raising the money and erecting the proposed church. The location is to be the same as the old one, 46th St., just off Fifth Ave. The plans submitted by William Welles Bosworth, Arch., 527 Fifth Ave., were accepted. Both on the west and the east front corners will be vestibules and staircases and elevators. The upper part will have a ceiling 24 ft. in height. The main auditorium will have a dome, lighted from above, with a ceiling that will be 70 ft. high. There will be galleries, and a pulpit platform. The whole will seat 1,400 persons.

Plans have been completed for a doctors' office building to occupy the plot, 50 × 100.5 ft., at 24 West 57th St. Henry D. Winans, 749 Fifth Ave., is interested.

The Pennsylvania R.R. Co. is planning a hotel in New York opposite the new terminal, in Seventh Ave. It would cover the east side of the avenue, from 32d to 33d St. The plot fronts 197 ft. on Seventh Ave., 250 ft. on 33d St., and 375 on 32d St. McKim, Mead & White, Archs., 160 Fifth Ave., are drawing plans. No contracts have been signed. Alex. Shand, Philadelphia, is Ch. Engr.

NEW YORK, N. Y.—Bids are asked until 2.30 p. m., Nov. 25, by Robert W. Hebberd, Comr. of Public Charities, for furnishing all the labor and materials required for laying heating mains for the east and west Tuberculosis buildings, Metropolitan Hospital, Blackwell's Island, the City of New York.

Plans have been filed for the proposed 20-story office building to be erected for Henry Corn as owner on the site of the old Clarendon Hotel, at the southeast corner of Fourth Ave. and 18th St. It is to be 263.8 ft. high, of a modern Renaissance type, from designs by Maynicke & Franke, Archs., 298 Fifth Ave., with mezzanine bays at the lowest three stories and ornamental cornices at the third and nineteenth stories and at the roof tier. The building will front 78½ ft. on the avenue and 175.2 ft. on the street, the facades being of brick finished with trimmings of limestone and terra cotta. The cost is estimated at $900,000.

Schwartz & Gross, Archs., 347 Fifth Ave., are preparing plans for two apartment houses to be erected on the former Furniss Estate, for Polstein & Backer, 220 Broadway. The houses will have eight stories, on ground dimensions of 75 × 100 ft. each, and are estimated to cost $200,000 each. One will be on the north side of 99th St. and the other on the south side of 100th St.

The Board of Education has approved the plans of three new elementary school buildings. One in Manhattan, an addition to Public School No. 78, Pleasant Ave. and 119th St., 30 class rooms; one in the Bronx, Public School No. 44, Prospect Ave. and East 176th St., 39 class rooms, and other rooms; and one in Brooklyn, Public School No. 166, Porter Ave. and Harrison St., 44 class rooms, two kindergartens, workshop, cooking room and science room, gymnasium and auditorium. The Committee on Sites recommended the acquisition of sites as follows: Homer Lee Ave. and Hedges Pl., south of Canonbury Road, Jamaica; Ridgewood and Benedict Aves. and Ferry St., Woodhaven; Sanford Ave., 24th and 25th Sts., Flushing; addition to site of Public School No. 55, Richmond Hill, all in Queens. C. B. J. Snyder is Supt. of School Bldgs., Dept. of Education.

NEW YORK, N. Y.—Plans have been filed for making over the 9-story St. Catherine apartment house, at the southeast corner of Madison Ave. and 53d St., into an office building for physicians, with several floors fitted as laboratories. The alterations are to be made at a cost of $60,000 for the St. Catherine Corporation from plans by Robert T. Lyon, Arch., Broadway and 43d St.

Neville & Bagge, Archs., 215 West 125th St., have been commissioned to prepare plans for the apartment house to be erected on Riverside Drive, at the north corner of 113th St., for Emanuel M. Krulewitch, of 412 West 148th St. It will have twelve stories, with ground dimensions of 114 × 85 × 100 × 111 ft.

The general contract has been let to DAWSON & ARCHER, 150 Fifth Ave., for additions to the building of the Methodist Book Concern, at 150 Fifth Ave. Estimated cost, $75,000. Milton Lee & Son, 6 West 22d St., are Archs.

Plans are being prepared by Thompson & Frohling, 114 East 28th St., for a 12-story apartment hotel to be built at Broadway and 145th St. It will have a frontage of 100 ft. on Broadway and 150 ft. in 145th St. The total estimated cost is $1,000,000. The owner is the Dow Construction Company, 1 Madison Ave., and the general contract has been awarded to the BUNTING BULL CO., 1 Madison Ave. Plans will be completed about Nov. 22.

NEW YORK, N. Y.—Moore & Landseidel, Archs., 148th St. and Third Ave., have been commissioned by Donald Robertson, 312 West 109th St., to prepare plans for a 5-story apartment house, 58 × 90 ft., to be erected at the northeast corner of 186th St. and St. Nicholas Ave. Estimated cost, $65,000.

The Twenty-Fifth Street Corporation, 4 West 25th St., will erect a 12-story loft building, 55 × 99 ft., at an estimated cost of $300,000. F. C. Zobel, 114 East 28th St., is Arch.

Plans have been completed by Schwartz & Gross, Archs., 347 Fifth Ave., for an 8-story elevator apartment house to be built for the D. A. Cushman Realty Co., George F. Wilcox, is Pres., at the southwest corner of Eighth Ave. and 49th St. The plans call for a building of the modern Renaissance pattern, having a frontage of 115 ft. and a depth of 125.10 ft. It is to contain 109 suites and will cost $250,000.

NEW YORK, N. Y.—Bids are asked by C. B. J. Snyder, Supt. of School Bldgs., Dept. of Education, until 3 p. m., Nov. 29, for forming teachers' room and exit at Public School No. 10, on 117th St. and St. Nicholas Ave., Boro. of Manhattan; for the general construction, etc., of new Public School No. 77, on the southerly side of Covert Ave., between Centre and George Sts., Ridgewood Park, Boro. of Queens; for the general construction, etc., of new Public School No. 166, on the easterly side of Porter Ave., between Ingraham St. and Harrison Pl., Boro. of Brooklyn.

NEW YORK, N. Y.—Bids are asked by the Armory Board, until 2 p. m., Nov. 30, for improvements and repairs to the roof of the 14th Regiment Armory at Eighth Ave. and 15th St., Boro. of Brooklyn; also for improvements and refinishing various company rooms in the Ninth Regiment Armory.

ROCHESTER, N. Y.—The American Hide & Leather Co., 171 Front St., will build a 1-story and basement warehouse, 90 × 115 ft., of concrete block construction on Exchange St., between Erie Ave. and the Pennsylvania R. R. Foote & Headley, 346 Cutler Bldg., are Archs.

SCHENECTADY, N. Y.—The Wallace Co. (formerly the Reeves-Luppman Co.), of Schenectady, N. Y., has closed negotiations for the purchase of property on State St., having a frontage of 47 ft. and a depth of 296 ft. The company plans to raze the building now existing on the site and to erect a building to be used as a department store. Plans are now being prepared.

BUFFALO, N. Y.—The Buffalo Glass Co., M. J. Blodgett, Pres., 98 Seneca St., will build a 4-story and basement warehouse, 72 × 165 ft., at Seneca and Carroll Sts., near Wells St. Brick and structural iron will be used. Cost, $60,000. H. H. Little, 56 Norwood Ave., is Arch.

NEWARK, N .J.—Alfred Peter, 238 Washington St., has prepared plans for the new edifice which is to be erected for St. Antonius' Roman Catholic Church at South Orange Ave. and South Ninth St. Estimated cost, $100,000.

JERSEY CITY, N. J.—Plans for the Immanuel Baptist Church, 357 Ocean Ave., at Hudson Boulevard, Jersey City, drawn by A. F. Leicht, 9 West 42d St., New York, have been accepted by the Trustees. No contracts have been let. The church, which will cost $50,000, will have a seating capacity of 600, and will be built of stone and brick. It will be finished in six months.

HACKENSACK, N. J.—We are officially advised that bids were received as follows on Sept. 30 by the County Building Committee of Bergen County, Hackensack, N. J., for erection and construction of a 3-story and basement fireproof court-house for Bergen County at Hackensack. The general contract has been awarded to JOHN T. BRADY CO., 103 Park Ave., at $564,849. Joseph Riley Gordon, 402 Fifth Ave., is Arch.

PHILADELPHIA, PA.—E. Allen Wilson, Arch., Land Title Bldg., has been commissioned to prepare plans and specifications for 26 2-story flat houses in West Philadelphia, to be erected at a cost of $100,000. The buildings will be of modern Colonial design, planned to suit various requirements. There will be an open court, with terraces and flower plats. Mr. Wilson will invite estimates in a few days.

The ROEBLING CONSTRUCTION CO., Land Title Bldg., has obtained a permit for the concrete work on the building for the Curtis Publishing Co., at Sixth and Walnut Sts. The cost of the work will be $205,000.

Plans have been drawn by George Spencer Morris and Richard Erskine, Crozer Bldg., for a church to be erected in Olney for St. James' Methodist Episcopal congregation of that suburb. The design is Gothic. The building will be of stone, 166 × 77 ft.

ARDMORE, PA.—Bids are asked until November 22, for the proposed Lower Merion High School, to be built in Ardmore. The building will be of granite, two stories and basement, 219 ft. 4 ins. by 69 ft. 4 ins., with an auditorium wing in the rear, 63 ft. 4 ins. by 72 ft. The building will contain a gymnasium under the auditorium, study halls, reference library, physical, biological and chemical laboratories, manual training, commercial and classical departments, cloak rooms, lunch rooms for students, superintendent's office, and about 30 class rooms. Cost, $200,000. Wilson Potter, 3 Union Sq., New York, is Arch.

BALTIMORE, MD.—The Northern Central Ry. Co., a subsidiary of the Pennsylvania R. R. Co., has made public the plans for the proposed union station to be erected on the site of the present station in Baltimore. It will be of classic design and will be of stone, terra cotta, brick and ornamental metals. The station is to be 275 ft. long and 60 ft. wide. The main waiting room will be 95 ft. long and 65 ft. wide and 35 ft. high. The entrances to the station will be from Charles and from St. Paul Sts. An inclosed lobby 50 ft. in width will extend across the seven passenger tracks, which will be 18 ft. below the main floor of the station. Eight stairways will lead to the train platforms. Noted fully last week.

CUMBERLAND, MD.—A company is being formed for the erection of a hotel in Cumberland, on Washington St. on what is known as the carnival grounds and near the Western Maryland R. R. and Pennsylvania R. R. station. There are to be 170 rooms in the building, of which 133 will be guest rooms, 70 with private baths. The front is to be patterned after the New Howard, of Baltimore. It is stated the building will cost about $150,000, and the furnishings $50,000 additional. The stock is to be $100,000, and a similar amount is to be subscribed in bonds. The hotel will be eight stories above the ground and two stories below. Those interested in the project include George L. Wellington, James A. McHenry, Carlton L. Bretz, ex-Judge Ferdinand Williams, John G. Miller, Capt. Robert H. Gordon and James Blackiston. It is expected that the building will be completed by July next. The building has been designed by Wyatt & Nolting, Keyser Bldg., Baltimore.

WASHINGTON, D. C.—Bids were received as follows on Nov. 15 by the Commissioners of the District of Columbia for the construction of a 4-room addition to Monroe School Building No. 72, on Columbia Road, between Sherman and Georgia Aves., Washington: W. E. Mooney, Lenman Bldg., $43,746; J. M. Dunn, Lincoln Ave. and Prospect St., $40,923; Joseph H. Gibbons, 1314 North Carolina Ave. N. E., $44,300; Burgess & Parsons, 1417 G St. N. W., $43,270; W. H. McCray, Bond Bldg., $44,800; Boyle Robertson Construction Co., $44,163 Thomas H. Melton, 621 F St. N W., $41,535; George E. Wyne, Munsey Bldg., $43,000. All contractors are of Washington.

KINGWOOD, W. VA.—We are officially advised that the Board of County Commissioners of Preston County has employed Milburn, Heister & Co., Archs., Home Life Bldg., Washington, D. C., to prepare plans and specifications for a county court-house to cost about $150,000. Contract will be let in the spring.

ALBANY, GA.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, has awarded contract for the construction of a post-office at Albany, Ga., to GUDE & CO., Prudential Bldg., Atlanta, Ga., at $97,383. Time, Dec. 1, 1910.

COLUMBUS, OHIO.—The City Engineer's office will soon have completed the plans and specifications for the erection of the stables in connection with the garbage disposal plant, to house the horses to be used by the city. It is understood that figures will be asked about Nov. 20. Over $50,000 will be expended on this building. Henry Maetzel is City Engr.

***TOLEDO, OHIO.**—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Dec. 20, for the installation of a conduit and wiring system and a standard clock system in the U. S. post-office, Toledo, Ohio.

Bids are asked at the same time for installation of a hot-water heating and ventilating apparatus and pumping plant in the U. S. post-office at Toledo.

***ATHENS, OHIO.**—Bids are asked by James Knox Taylor, Super. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Dec. 28, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. post-office at Athens.

LA FAYETTE, IND.—The School Board has ordered plans on which bids will be invited for the construction of a high school building. Dan W. Sims is Chn.

PERU, IND.—The School Trustees have awarded a contract for the construction of a high school building to F. J. RUMP, of Fort Wayne, Ind., at $68,220.

INDIANAPOLIS, IND.—The Board of Trustees of the Indiana State School for the Deaf has awarded the contract for the installation of the mechanical equipment at the new home to WOOLLEN & CALLON, 19 South Alabama St., Indianapolis, the contract price being $39,725. The work, according to the terms of the contract, is to be completed by March 1.

NEW ALBANY, IND.—Bids are asked by the County Commissioners until noon, Dec. 6, for the erection of a county workhouse in the city of New Albany. Julian T. Miller is County Audr.

BELVIDERE, ILL.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Belvidere, Ill., to G. MAFFIOLI & SON, Rockford, Ill., at $46,872. Time, Nov. 15, 1910.

BELLEVILLE, ILL.—Bids were received as follows on Nov. 16, by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office building at Belleville, Ill.: John G. Unkefer, Minerva, Ohio, $[illegible]400; Globe Construction Co., St. Louis, [illegible], $83,230; McHenry-Beattly Co., East L[illegible]rpool, Ill., $74,690; William H. Fissell [illegible] Co., New York, $75,973; Christ Kauzler [illegible] Son, Evansville, Ind., $91,000; Hiram L[illegible] Building & Construction Co., St. Louis, $[illegible]897; General Construction Co., Hadham Bldg., Milwaukee, $78,180; Hazelton & W[illegible]n, Chicago, $75,000; Bauer Bros. Co., Belleville, Ill., $92,860; Harmon Bros. Co., Williamsport, Pa., $89,337; C. L. Gray Construction Co., St. Louis, $81,887.

MILWAUKEE, WIS.—Kirchh[illegible] & Rose, Archs., Majestic Bldg., Milwaukee, are preparing plans and specifications [illegible] a theater building, 50 × 150 ft., to cost $[illegible]5,000, for Fehr & Trotman, on Third [illegible] between North Ave. and Lee St.

The Milwaukee County Board of Supervisors has voted to acquire possession of four square blocks bounded by W[illegible]s, State, Eighth and Tenth Sts., as a site for the proposed $2,500,000 court-house.

MADISON, WIS.—The International Harvester Co. has awarded contracts for a warehouse at 301-311 South Blount St., Madison, Wis., as follows: General contract, JOHN F. FINDORFF, Madison; cement work, GEORGE LARSON; brick work, MORGAN & MORGAN; wiring, R. J. NICKLES; painting, MAUTZ BROS. W. D. Price, Chicago, is Arch.

RACINE, WIS.—We are officially advised that the First National Bank of Racine contemplates erecting a building. No definite plans have been drawn. G. N. Fratt is Cashier.

DES MOINES, IOWA.—See item under Light and Power Plants.

FORT DODGE, IOWA.—Bids were received as follows on Nov. 11, 1909, at the office of James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office building at Fort Dodge, Iowa: J. H. Wiese, South Omaha, Neb., $114,950; W. J. McAlpine, Dixon, Ill., $127,600; General Construction Co., Milwaukee, Wis., $116,988; J. W. Miller, St. Paul, Minn., $121,000; Hazelton & Walin, Chicago, $118,000; Paul Riesen's Sons, Milwaukee, Wis., $118,777.

***FORT MEADE, S. DAK.**—Bids are asked by the Constructing Q. M. until 10 a. m., Dec. 6, for constructing one double set of quarters for two company officers and four cavalry stables, and for installing plumbing, heating, electric wiring and electric lighting fixtures in buildings specified and for the construction of roads, sidewalks, gutters and drains.

KANSAS CITY, MO.—The Zahner Mfg. Co. is planning a 10-story building at 12 West Tenth St. Preliminary plans have been prepared. The new building will be between the Victor Bldg., at the corner of Tenth and Main Sts., and the First National Bank Bldg., at the corner of Tenth St. and Baltimore Ave.

SAN ANGELO, TEX.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, has awarded contract for the construction of a post-office at San Angelo, Tex., to the KING LUMBER CO., Charlottesville, Va., at $112,250.

EAGLE PASS, TEX.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, has rejected all bids for the post-office at Eagle Pass., Tex., as being in excess of the appropriation.

OKLAHOMA CITY, OKLA.—W. S. Tinsman, Southwestern agent for the Rock Island system, has tentatively approved plans drawn by W. A. Burke, City Engr., for the expenditure of $3,000,000 by the railroad companies entering Oklahoma City for building a union depot and making the necessary changes in tracks.

BOULDER, COLO.—Press reports state that the Regents of the University of Colorado in their last report to the State Legislature noted the approximate value of all university buildings as about $400,000. Since that report the Law Building has been erected at a cost of about $70,000. Work has been begun on the Macky Auditorium, which will cost $250,000 exclusive of the cost of organ and furnishings; this building is being built with funds provided by the will of Andrew J. Macky, of Boulder. In addition to these two buildings, work is in progress on a $70,000 heating plant and a $36,000 addition to the Hale Science Building, the funds for which were provided by the Legislature. An appropriation of $70,000 was also made for the central portion of a projected $270,000 museum building; work on this building will begin soon. James H. Baker is Pres.

ALBUQUERQUE, N. MEX.—The local lodge of Masons of Albuquerque has determined upon the erection of a new club building. The structure will be on Seventh St. and will cost about $40,000.

PORTLAND, ORE.—We are officially advised that W. L. Morgan, Arch., Abington Bldg., will construct a modern building, to cost not less than $100,000 on the quarter block on the northwest corner of Fourth and Alder Sts. Definite plans will be settled in about a month. Construction is to commence about March 1.

We are officially informed that plans and specifications have been prepared in the office of J. W. Morris, City Engr., for a 2-story and basement building, which will be built on Powell St., near Milwaukee Ave., at Sellwood, to be used for the city as a stable. It will be 80 × 200 ft., with concrete basement walls, the upper stories of brick. The contract has been let to the UNITED ENGINEERING & CONSTRUCTION CO., Lumbermen's Bldg., Portland, at $36,900. Bids were received on Oct. 28.

SALEM, ORE.—Contract for the erection of a receiving ward has been let by the State Asylum Board to the NORTHWESTERN BRIDGE WORKS, of Portland, for $77,800. The contract for wiring has been let to EVANS & NIXON, of Tacoma, Wash. J. A. BERNARD has the heating contract for $3,270 and the plumbing for $9,736.

SACRAMENTO, CAL.—It is stated that the contract for the construction of a 4-story hotel building on the site of the present State House has been awarded to the RANSONE CONSTRUCTION CO. by William Sand, the owner. Building will cost $123,000.

HOLLYWOOD, CAL.—The erection at Hollywood of a tourist hotel, which, with its furnishings, will represent an investment of $350,000, is contemplated by the Stricker Hotel Co., recently incorporated for $400,000. Directors: A. D. Stricker, Daniel Innes, Mary S. S. Davis, Dr. L. E. Landone and Judge John D. Works.

MARYSVILLE, CAL.—The Board of Education has awarded the contract for construction of the new high school building to PARKER & KENYON, of San Francisco, for $40,000. The building is to be completed by March 15. Bids have been received for several sites.

BAKERSFIELD, CAL.—E. L. Jefferson, Arch., of Bakersfield, Cal., is preparing plans for extensive alterations to the Broderick Building on 19th St. It is estimated to cost $50,000.

OAKLAND, CAL.—The Board of Supervisors has appointed a committee consisting of Dr. W. A. Clark, Supt. of the County Infirmary; Dr. O. D. Hamlin, Ch. Surgeon of the Receiving Hospital, and Chief Surgeon Ainsworth, of the Southern Pacific Co., to confer with architects regarding the enlargement and modernization of the County Infirmary. It is planned that the committee of physicians named shall confer with architects and secure tentative plans for proper hospital facilities. It is estimated that the buildings will cost about $500,000. This will provide ample accommodations for an indigent population of from 500 to 600. The present number of indigents at the infirmary is less than 400.

SAN DIEGO, CAL.—Plans for proposed federal building to be erected in southwestern section of city have been completed by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., and will soon be received. The building will cost $130,000.

LOS ANGELES, CAL.—The Westlake Masonic Temple Association of Los Angeles, Cal., has been incorporated with a capital of $50,000 for the purpose of erecting a building to be used exclusively for lodge purposes by the Westlake Lodge of Masons. A lot at the corner Eighth St. and Burlington Ave. has been purchased for a site.

Parkinson & Bergstrom, Archs., Security Bldg., Los Angeles, Cal., have awarded the ALTA PLANING MILL CO., 830 McGarry St., the contract to erect a brick warehouse for the Spreckels Bros. Commercial Co. Cost, $95,000. It will be four stories high, 352 × 80 ft.

The erection of an 8 or 10-story office building, to cost $500,000, at the corner of Seventh and Olive Sts., is contemplated by Joseph Burkhard, Pres. of Occidental Life Insurance Co.

An 8-story hotel building, with stores on the first floor, will be erected on the east side of North Spring St., above Second St., by Robert Marsh & Co., Inc., 140 West Fifth St. The cost will be about $75,000. It will be erected on a lot 60 × 174 ft., immediately adjoining the Los Angeles Trust Co.'s building on the north.

SAN FRANCISCO, CAL.—We are officially advised that the plans that were received from Bodley & Hare, English Archs., for the Protestant Episcopal Cathedral, to be erected on the block formerly occupied by the Charles Crocker and W. H. Crocker homes on Nob Hill, are to be modified to meet local conditions in some respects, but they will be used in most regards as they have been prepared. The length of the cathedral will be 275 ft. The height will be 280 ft. The greatest width of the cathedral will be 200 ft. The framework will be of steel. Inside and out the finish will be stone. The drawings of the crypt are now in the hands of L. P. Hobart, Arch., Crocker Bldg., San Francisco. As soon as they are completed construction will begin. The general effect of the structure will be that of an old English cathedral with a main central octagonal tower. When it is completed the cathedral will give seating accommodations to 2,000. No contracts have been let. Bids will be received from time to time as various portions are completed. The building will be erected by the Grace Cathedral Corporation.

The Southern Pacific Co. has purchased two city blocks at San Francisco, on which several receiving and forwarding buildings will be erected. The price paid for the property is said to be $1,725,000. W. Hood, San Francisco, is Ch. Engr.

Plans and specifications for two new public schools have been completed by Loring P. Rixford, City Arch., the combined cost of which will be about $250,000. They are the Spring Valley Grammar School and the Portola School. The Spring Valley School will be located in the square bounded by Washington, Jackson, Hyde and Larkin Sts., and will face on Jackson St., the portion toward Washington St. being used as a yard. The ground floor will contain the assembly hall, toilet rooms, manual training and domestic science rooms and the heating and ventilating apparatus. Each of the two upper floors will have six class rooms, as well as teachers' and principal's rooms. The building will be of concrete construction and accommodate 540 pupils. The building will have two inside standpipes and hose reels on each floor. The Portola School will be on a lot, 200 × 240 ft., bounded by Berlin, Bacon and Girard Sts. It will face southeast on Bacon St., the front portion being two stories high, with wings one story high facing on the other streets. The ground floor will have a class room, assembly hall, toilet and store rooms and two large special class rooms. The second floor will have eight class rooms, teachers' room, lunch and other utility rooms. The first story will be built of concrete, the second of wood, with metal lath throughout. All the windows and outside doors will be of metal. The building will be heated by steam and equipped with a vacuum cleaning plant. Separate water systems will be installed in both schools which will supply the drinking fountains with filtered water.

SAN FRANCISCO, CAL.—Bids will be received on Nov. 24 by the Board of Public Works for the foundation work and for the steel work of the new San Francisco hospital. The estimated cost of the excavation and foundation work is $17,500 and of the steel frame $62,000.

Mrs. M. A. Huntington will erect a residence on the northeast corner of Jackson and Maple Sts. from plans prepared by Herman Barth, Arch., 641 Mission St. The structure will stand on a lot 75 × 155 ft. The building will be 40 × 70 ft. in ground dimensions. The estimated cost is about $45,000. The height will include two floors, basement and attic. The structure is designed on the Elizabethan style both for the exterior and the interior. The exterior of the basement will be of smooth faced klinker brick and the upper stories of cement plaster. The roof will be of English terra-cotta tile to match the brick work. A garage will be constructed on the east side of the building.

MONTREAL, QUE.—We are officially advised that Sir Thomas Shaugnessy, Pres. Canadian Pacific Ry. Co., has approved of the plans of the C. P. R. Windsor St. station extension. It will cost about $2,500,000. The new structures will be 300 × 800 ft. With the fall in the elevation in St. Antoine St. the main building will rise to seven stories at that end, and the lower tower, about 100 ft. from the St. Antoine St. end, will be at the height of twelve stories from the street level, all devoted to additional office accommodation. There will be a waiting room and concourse, which will follow the general lines of the South Station at Boston. There will be three fireproof buildings, a trainshed, viaduct and a power plant. W. S. Painter, Montreal, is Ch. Arch., C. P. R. Bids will be received about Jan. 1.

The King Edward Park & Amusement Co., Joseph Gravel, proprietor, St. Catharine St. East, will erect a 400-room hotel at Isle Gros Bois in connection with the plans for the park. Plans have been prepared by Theo. Daoust, Arch., 103 St. Francois Xavier St., Montreal.

It is stated that the Ritz Hotel Co. will purchase the site of the Art Gallery, on Phillips Sq. The Engineers' Club, which is situated south of the Dow property, recently acquired by the Ritz interests, may sell its site to the hotel people, provided they can secure a suitable site to erect larger quarters.

MONTREAL, QUE.—C. E. DEAKIN, 11 St. Sacrament St., has been awarded the contract for the erection of the Royal Arthur School. Cost, $82,452.

TORONTO, ONT.—The Board of Education has taken out a permit for a 3-story brick school to be erected at the corner of Marion St. and Lansdowne Ave., to cost $55,000; also for a 3-story brick high school on Harbord St., to cost $50,000, and for a 2-story public school on George St., to cost $13,000.

PORT ARTHUR, ONT.—The plans of G. E. Tanquay, Arch., 2 Abraham Hill, Quebec, Que., for the proposed cathedral at the corner of Arthur and Algoma Sts. have been accepted by the congregation of St. Andrew's Roman Catholic Church. Estimated cost, $85,000 to $100,000.

HAMILTON, ONT.—Plans have been prepared by Stewart & Witton, Archs., 7 Hughson St., for an addition to No. 3 Police Station. Cost, $40,000.

WINNIPEG, MAN.—The Grey Nuns are having plans prepared here for new buildings to cost approximately $300,000.

The Orpheum Theatrical Circuit, of New York, has purchased a site here on which to erect a theater.

Smith & Bruce, Archs., 261 Fort St., are preparing plans for buildings to cost over $600,000. Several apartment blocks are among the number.

VANCOUVER, B. C.—Lightheart Bros. are having plans prepared for a fully modern apartment block to cost $100,000.

VANCOUVER, B. C.—The Vancouver Labor Temple Co., Ltd., purposes to erect a temple to cost about $40,000 at the corner of Homer and Dunsmuir Sts. H. Sellers is Chn.; C. Killam, Secy.

The School Board has passed estimates providing for the expenditure of $260,000 during the coming year, which were as follows: $117,500 for two 8-room buildings, one between Spruce and Alder Sts., the other on the block between Tenth and Eleventh Aves.; $25,000, cost of land in Kitsalano; $30,000 to cover the cost of an office building and equipment.

TEPIC, MEXICO.—Gen. Mariano Ruiz, Governor of Tepic Territory, has completed arrangements for erection of a market house here to cost $100,000. It will be built by Mexico City interests.

WATER-SUPPLY—IRRIGATION.

(denotes that this work is advertised in Engineering News.)*

SPRINGFIELD, MASS.—The Water Commissioners on Nov. 8 awarded contract for 4,000 lbs. of lead pipe to the C. S. MERSICK CO., of New Haven, Conn., at $4.75 per cwt.

PROVIDENCE, R. I.—Bids will be received until Nov. 23 by the Board Contract and Supply, Henry Fletcher, Mayor and Chn., for furnishing and delivering for the Department Public Works 746 tons of 2,000 lbs. each 16, 8, 6 and 4-in. 1-1. water pipe.

BUFFALO, N. Y.—We are officially advised that WILLIAM FRANKLIN was low bidder on Nov. 1 for the removal of rock for foundation of new engine No. 2 for pump well. F. G. Ward is Comr. Pub. Wks.

NEW YORK, N. Y.—Bids were opened on Oct. 29 by John H. O'Brien, Comr. Water Supply, Gas and Electricity, for laying water mains. The lowest bidders follow: Laying mains on Broadway, 105th St., 119th St. and other streets, Melrose Construction Co., 147 E. 125th St., at $35,272; in David. Garrison and other streets, same, at $48,148; in Spuyten Duyvil Parkway and Riverside Ave., Henry E. Fox, 80 W. 125th St., $64,161; in West Farms Road and Mianna St., L. D. Gregory, 125th St. and First Ave., $30,804.

*NEW YORK, N. Y.—Bids will be received by the Board of Water Supply until 11 a. m., Dec. 2, for Contract 62, for the construction of seven steel pipe siphons, consisting of riveted steel shell, 9 ft. 6 ins. nominal inside diameter, enveloped with concrete and lined with Portland cement mortar, aggregating about 3.7 miles; also several stretches of aqueduct in open cut and on embankment, or cut-and-cover aqueduct aggregating about 3,000 ft. The work is located in the towns of Olive, Ulster County, New Windsor, Orange County, Phillipstown, Putnam County, and Cortlandt, Westchester County. J. Waldo Smith is Ch. Engr.

BLOOMFIELD, N. J.—Contract for furnishing 150,000 lbs. of c.-i. water pipe and 3,000 lbs. special castings, bids opened on Nov. 3, has been awarded to R. D. WOOD & CO., 300 Chestnut St., Philadelphia, Pa.

*EAST ORANGE, N. J.—Bids will be received until 8 p. m., Dec. 7, by the Board of Water Commissioners, for 310 tons of c.-i. water pipe and 50 tons of specials. A. A. Reimer is Clk.

TITUSVILLE, PA.—R. D. WOOD & CO., 300 Chestnut St., Philadelphia, Pa., has been awarded contract at $24.75 per ton for furnishing 1,500 ft. of standard 6-in. c.-i. water pipe.

NEWARK, DEL.—Bids are asked until Nov. 22 for furnishing and laying about 1,800 ft. of 4-in. c.-i. pipe. F. B. Jacobs is Chn. Light & Water Com.

*WASHINGTON, D. C.—Bids are asked until noon, Nov, 22, by the District Commissioners for furnishing water meters.

KEYSER, W. VA.—The city will spend $20,000 for the construction of retaining dam at the water-works reservoir. Capacity 30,000,000 gallons. Plans have been prepared by Lee Schaldt, Cumberland, Md.

WILMINGTON, N. C.—Additional contracts for the rehabilitation of the municipal water-works were awarded on Nov. 1 as follows: For high duty pump and engine to HENRY R. WORTHINGTON, 115 Broadway, New York, at $16,000; centrifugal pump of 2,500,000 gallons capacity to WHITTED & WHITE, Inc., Charlotte, N. C., at $1,592; steam plant to BABCOCK & WILCOX CO., Atlanta, Ga., at about $7,892; generator and engine of 16-HP., 10-KW., to ALEXANDER & GARSTED, Charlotte, at $777, and tower and tank, to R. D. COLE MFG. CO., Newnan, Ga., at $7,290. Hazlehurst & Anderson, of Atlanta, Ga., and Wilmington, Del., are Engrs.

JONESBORO, S. C.—The city has voted bonds to purchase or construct a water-works system.

BEAUFORT, S. C.—The city has voted bonds to purchase or construct a water-works system.

ANDERSON, S. C.—Anderson Water, Light & Power Co. will sink 60 new wells, increasing city's water supply.

SAVANNAH, GA.—Bids will be received by the Park and Tree Commission, P. D. Daffin, Chn., until Nov. 29 for furnishing and erecting a steel tower and tank of 50,000 gallons capacity.

JACKSON, MISS.—The City Council has voted $100,000 of bonds for filtration plant and other improvements to the water-works.

ACKERMAN, MISS.—The city has awarded contract to WALTON & WEGNER, Atlanta Ga., for constructing water-works and electric light plant; reservoir to have a capacity of 15,000 gallons. X. A. Kramer, Magnolia, Miss., is Engr.

*GULFPORT, MISS.—Bids are asked by the city until Dec. 7 for laying 14,580 ft. of 8-in. pipe, 27,700 ft. of 6-in. pipe and 2,000 ft. of 4-in. pipe, a total of 44,280 ft. of piping. Estimated cost, $34,000. Bids will also be opened for construction of pumping station, furnishing of fire pump, one constant-duty pump and fire-alaram system. Estimated total cost, about $50,000. M. F. Sullivan is City Engr.

*INDIANOLA, MISS.—Bids are asked until 2 p. m., Dec. 2, by the Board of Aldermen for water-works machinery. For details see advertisement in this issue. R. C. Huston is Consulting Engr., 725 Maison Blanche, New Orleans, La.

MERIDIAN, MISS.—We are officialy advised that the city will construct an impounding reservoir to cover about 80 acres of land and to hold approximately 4,000,000 gallons of water, and a reinforced concrete 30-in. conduit about two miles in length from the impounding reservoir to the pumping station. The reservoir work will probably not start until next year, but are now being prepared for the conduit. W. F. Wilcox is Mgr. W.-Wks. Noted on Nov. 4.

ACKERMAN, MISS.—See item under Light and Power Plants.

ALEXANDRIA LA.—See item under Light and Power Plants.

ASHTABULA, OHIO.—We are officially advised that contract has been awarded to the BABCOCK & WILCOX CO., of Cleveland Ohio, at $6,131, by the city for furnishing and installing two 250-HP. Sterling water-tube boilers. A. J. Richardson is Clk. Bd. Pub. Ser. Bids were opened on Nov. 6.

PONTIAC, MICH.—The citizens on Nov. 1 voted to issue $125,000 of bonds for the extension of the city's water supply, proposed improvements to consist of a 2,000,000-gallon reservoir with eight new wells and a new 5,000,000-gallon pump and several miles of new water mains.

KENOSHA, WIS.—The Board of Water Commissioners has decided to build a new intake to secure a supply of pure water for the city. The intake will be built out into the lake to a distance of 1½ miles. Estimated cost, between $90,000 and $125,000.

AURORA, MINN.—The village proposes to construct water-works to cost $14,000. E. Wallgren of Aurora, is Engr.

BRECKENRIDGE, MINN.—We are officially advised that bids were rceived on Nov. 5 by the Water and Light Commission, F. L. Pierce, Secy., for that part of the mechanical filtration plant and system covering the following work: Intake basin, pumping machinery, electrical equipment, 150,000-gallon tank and tower, piping and brick buildings. Contract has been let to J. G. ROBERTSON, St. Paul, for intake, six pumps, electrical apparatus, etc., and to the CHICAGO BRIDGE AND IRON WORKS, 105th and Throop Sts., Chicago, Ill., for steel tower and tank. Edward P. Buch is Engr., Minneapolis.

ST. PAUL, MINN.—Bids will be received until Nov. 22, by the Board of Water Commissioners for furnishing and delivering f. o. b. cars St. Paul about 60,000 lin. ft. of 6-in., 15,000 ft. of 8-in., 12,000 ft. of 12-in., and 9,000 ft. of 16-in. c.-i. water pipe.

MARION, KAN.—See item under Light and Power Plants.

ERIE, KAN.—The citizens on Nov. 2 voted to issue $50,000 of bonds for the construction of water-works and an electric light plant.

VALENTINE, NEB.—See item under Light and Power Plants.

*CASPER, WYO.—We are officially advised that bids were received at the office of the United States Reclamation Service, 423 Commonwealth Bldg., Denver, Colo., on Oct. 28, for building the Pathfinder dike, situated about 45 miles southwest of here, and involving about 160,000 cu. yds. of earth excavation, 8,000 cu. yds. of pavement and 2,000 cu. yds. of concrete masonry. The bids follow: Geddis & Seerie Stone Co., 611 Continental Bldg. Denver, Colo., $265,407; James O'Connor, 231 Park Ave., Council Bluffs, Iowa, $274,327. These bids were rejected as excessive. Frank Pierce is Acting Secy.

HAMILTON, MONT—The Bitter Root Valley Irrigation Co. has let contract for the construction of 26 miles of ditch to THOMAS J. WHITE. About 350,000 yds. of earth and rock will be moved.

INDEPENDENCE MO.—The County Commissioners have awarded to the FREEBORN ENGINEERING & CONSTRUCTION CO., Scarritt Bldg., Kansas City, contract for the construction of a water system, purification plant and tower at the county farm at $24,500.

FORT WORTH, TEX.—The city has voted $275,000 of bonds for the extension of water-works and also contemplates issuing early next year $100,000 of additional bonds for general improvements.

SENTINEL, OKLA.—The city will spend $15,000 for water-works construction, installing a 40-HP. engine and erect standpipe of 60,000 barrels capacity. J. E. Deaton is interested.

STILLWELL, OKLA.—The city proposes to construct water-works and an electric light plant. Estimated cost, $51,000. O'Neil Engineering Co., of Dallas, Tex., is Engr.

FORT LOGAN, COLO.—Bids are asked by Capt. Chase Doster, Constructing Q. M., U. S. A., until 9 a. m., Dec. 14, for construction of a pump house here, separate bids to be received in following sections: Construction of building, plumbing, electric light wiring, boilers and appurtenances air compressors, steam pumps and piping. Alternate bid for electrical installation of plant. Specifications are on file at office of Engineers News, New York.

DENVER, COLO.—A. M. Patten, of Denver, is at the head of an enterprise to irrigate 5,000 acres of land in Lincoln County, New Mex. A dam and reservoir will be built. Estimated cost, $110,000.

CARLSBAD, N. MEX.—The application of G. B. Shaw, Chicago, Francis G. Tracy, C. R. Price and I. S. Osborne all of Carlsbad, for rights to the construction of an irrigation system in the northern part of Eddy County has been approved by Territorial Engineer. A dam to cost $30,000 will be built.

CHELAN, WASH.—The land owners of Howard flat are planning to form a company for the purpose of irrigating their land. The land will be bonded and money raised to install an irrigating plant to pump water from the Chelan River.

ELLENSBURG, WASH.—The Kittitas High Line Canal Associaton has announced that an agreement has been reached which guarantees the construction of the canal. The Reclamation Service has agreed to build the necessary storage dams at Lake Kaches.

SULTAN, WASH.—Bids will be received until Dec. 1 by Thomas W. Musgrove, Town Clerk, for constructing of water system.

DOUGLAS, ARIZ.—The citizens have decided upon the purchase of the water plant of the Douglas Improvement Co., at cost of $225,000. An additional appropriation of $100,000 will be made to cover the cost of necessary improvements.

OTTAWA, ONT.—The city will lay 42-in. aqueduct to Napean Lake at a cost of $64,000. The work will be done by day labor. N. J. Ker is City Engr.

TRAIL, B. C.—The ratepayers have voted in favor of installing a municipal owned water-works system. Estimated cost, $25,000.

OAXACA, MEX.—The State of Oaxaca, Mex., has had plans drawn by Rafael Pimental, Engr. for a large concrete dam to be erected in the state. Water will be impounded to irrigate 10,000 acres of land. Cost, about $20,000.

SEWERAGE.

(** denotes that this work is advertised in Engineering News.*)

BOSTON, MASS.—Contract for constructing sewers in Kingsdale St. and Talbot Ave. has been awarded by the city to E. F. KENNEALLY, at $3,103.

PROVIDENCE, R. I.—We are officially advised that the Board of Contract and Supply opened bids on Nov. 9 for the construction of a sewer in Kingsley Ave., from Eagle St. to the intercepting sewer in Gaspee St., the work including 5,620 lin. ft. of 30-in. circular brick and concrete sewer, material furnished by city. Contract has been awarded to FRANK GAMINO, at $48,319.

NEW YORK, N. Y.—Bids are asked by John F. Murray, Pres. Boro. of the Bronx, until 11 a. m., Nov. 30, for constructing sewers in various streets in the Bronx.

BROOKLYN, N. Y.—Bids are asked by Bird S. Coler, Boro. Pres., until 11 a. m., Nov. 24, for furnishing all the labor and material required for constructing sewer basin at the easterly corner of Fort Hamilton Ave. and 42d St. pursuant to Section 394 of the Greater New York Charter.

BUFFALO, N. Y.—The BUFFALO DREDGING CO., D. S. Morgan Bldg., Buffalo, has been awarded contract by the Department of Public Works for removing the present trunk sewer outlet and the construction of a new trunk sewer outlet under the Black Rock harbor and channel at foot of Albany St., at $110,000. Bids were opened on Oct. 30. List of bidders noted last week. F. G. Ward is Comr.

KEYPORT, N. Y.—We are officially advised that Clyde Potts, Consulting Engr., 30 Church St., New York, has been retained to design sewerage and sewage disposal works for Keyport. Cornelius Ackerson is Secy. Sewerage Com.

MORRISTOWN, N. J.—Bids are asked by the Board of Sewerage until 11 a. m., Dec. 2, for repairing and cleaning sewers, siphon chambers and manholes. P. H. Cooper is Chn.

SHARPSBURG, PA.—The officials of the boroughs of Sharpsburg, Etna, Millvale and Aspinwall are considering the construction of a sewage disposal plant to be paid for jointly. Estimated cost, $150,000.

*BALTIMORE, MD.—Bids will be received by the Board of Awards at the office of J. Sewell Thomas, City Register, until 11 a. m., Dec. 1, for constructing sanitary lateral sewers in Districts 21 and 27, Contracts 44 and 45. For details see advertisement in this issue.

WINCHESTER, VA.—The city has voted bonds for the construction of sewers.

TRENTON, TENN.—SULLIVAN & LONG, Bessemer, Ala., have been awarded contract by the city, at $18,632, for constructing a system of sanitary sewers comprising about 35,000 lin. ft. of vitrified sewers from 8 to 18 ins. in diameter, manholes, flush tanks, etc. Bids were opened on Nov. 5. J. M. Skiles is City Recdr.

CHATTANOOGA, TENN.—The Board of Public Works, H. F. Van Dusen, Chn., has opened bids for Chattanooga Creek system of intercepting sewers. The Noll Construction Co., 8 East Sixth St., Chattanooga, is the lowest bidder. Estimated cost, $70,000.

Isaac C. Mishler, 310 McCallie Ave., is lowest bidder for construction of small pipe sewers in Long and other streets. Estimated cost, about $5,635.

WINCHESTER, KY.—The citizens on Nov. 2 voted to issue $65,000 of bonds for the construction of sewers.

MOUNT STERLING, KY.—On Nov. 2 the citizens voted to issue bonds for the construction of a sewerage system.

GREENVILLE, OHIO.—Bids are asked until noon, Nov. 27, by the County Commissioners, for furnishing c.-i. sewer pipe, corrugated iron sewer pie and vitrified saltglazed sewer pipe in sizes of from 12 to 48-in., inclusive. E. K. Lott is Clk.

COLUMBUS, OHIO.—Bids will be received until Nov. 24 by the Board of Public Service, E. W. Hirsch, Secy., for constructing sewers in Seventh St. and several alleys.

ELMWOOD PLACE, OHIO.—Bids will be received by the Council until noon, Dec. 10, for construction of sewers, sewage disposal works, flushing tunnels, drains, ditches and appurtenances. T. T. McQueen is Clk.

YOUNGSTOWN, OHIO.—We are officially advised that S. H. De Groodt, Youngstown, was low bidder on the Byron St. sewer, and Gartland Bros. for the Car, Hawn and Ayers Sts. sewer. W. H. McMillin is Clk. Bd. Pub. Ser.

*BELLEVILLE, IND.—See item under Streets and Roads.

LA FAYETTE, IND.—CHARLES TERRY has been awarded contract for constructing the North Salisbury St. sewer in the Harvey Addition.

MARINE CITY, MICH.—DOUX & FARREL have been awarded by the city contract for constructing the Bell Ave. sewer.

BLOOMINGTON, ILL.—Bids will be received until Nov. 18 by the city for the construction of 15 and 12-in. pipe sewers in Western Ave. E. Folsom is City Engr.

ALTON, ILL.—The Board of Local Improvements is considering the construction of the East End trunk sewer system. Estimated cost, about $96,000.

JOLIET, ILL.—The Board of Local Improvements on Nov. 9 awarded contract to C. R. Spears for the construction of sewers in Henry, Akin and Hobbs Aves. William S. Welch is Clk.

GALESBURG, ILL.—Bids are asked until 2 p. m., Nov. 20, by the Board of Local Improvements for the construction of a sanitary sewer.

SYCAMORE, ILL.—Bids are asked by the Board of Local Improvements until 4 p. m., Nov. 24, for the construction of about 6,655 ft. of 8, 10 and 12-in. sewer, with the necessary manholes, lampholes, etc., to be laid in the east side of the city. Estimated cost, $5,300. W. M. Hay is Engr.

CENTERVILLE, IOWA.—A. M. PEATMAN has been awarded contract by the city, at 66 cts. per ft. and $82.50 for flush tank for the construction of the North Ninth St. sewer.

PARSONS, KAN.—The city proposes to construct a septic tank and filter beds. Estimated cost, between $20,000 and $25,000.

GARDEN CITY, KAN.—J. E. Worley, of Kansas City, Mo., is preparing preliminary plans for a sanitary sewer for Garden City. Estimated cost, between $7,000 and $10,000.

ABILENE, KAN.—Bids are asked until 6 p. m., Nov. 19, by the city for the construction and installation of a sewer in District 6. J. A. Graves is City Clk.

GREAT BEND, KAN.—Bids are asked by the City Clerk until 2 p. m., Dec. 7, for the construction of a sanitary sewer system, including furnishing and installing all appurtenances. The construction and furnishing of all material is expected to be let as one contract, but a separate proposal will be required for the trunk lines and septic tank and another proposal for the laterals. Unit prices are required on all the various kinds of work. The W. K. Palmer Co., are Engrs., Dwight Bldg., Kansas City, Mo.

FARGO, N. DAK.—JAMES KENNEDY, of Fargo, it is stated, has secured contract for the construction of two sewers in Fargo, at about $80,000.

KANSAS CITY, MO.—Contract for constructing the storm and sanitary sewers in the new district bounded by 39th St. on the north, 47th St. on the south, Woodland Ave. on the east and Park Ave. on the west, has been awarded by the Board of Public Works to MICHAEL WALSH, at $58,092. The entire district is to be sewered, the sizes running from 8 to 34 ins.

DALLAS, TEX.—The city has awarded contract to F. H. LANCASHIRE, of Dallas, at about $19,000, for constructing storm sewers in Washington and Haskell Aves. J. M. Preston is City Engr.

KINGFISHER, OKLA.—The city has awarded contract to T. W. ROBERTS, Chickasha, Okla., at $10,605 for constructing sanitary sewers. Edward Price is City Clk.

OKLAHOMA CITY, OKLA.—Bids are asked by the city until Nov. 22 for the construction of a sanitary main sewer, consisting of lines A, B, C and E, and for lateral sewer in Gault's Addition, Gault & Johnson's Addition, Park Place Addition, etc. Bob Parman is City Clk.

ENID, OKLA.—Bids will be received by E. R. Lee, City Clk., until 9 p. m., Nov. 19, for furnishing all materials and doing and performing all the work mentioned and contained in the specifications for building an egg-shape brick storm sewer, beginning at a point in Elm Ave., on or about the east line of Kenwood Boulevard, thence in a northwesterly direction in Kenwood Boulevard to Pine Ave., thence west in Pine Ave. to the west line of Van Buren St.

HOLLY, COLO.—Bids are asked until 3 p. m., Nov. 19, by the Town Clerk, for the construction of a system of sewers for sanitary drainage in Sewer District No. 2. The W. K. Palmer Co. are Engrs., Dwight Bldg., Kansas City, Mo.

VANCOUVER, WASH.—The contract for constructing sewers in Grant, Harney, Ingalls and Jefferson Sts. was let on Nov. 1 by the City Council to the CASCADE CONTRACT CO., at $17,570.

SOUTH PASADENA, CAL.—B. F. Dupuy, City Engr., has plans for a storm sewer estimated to cost $37,000, to be constructed through the main streets of the city and to be of concrete, brick and vitrified pipe construction. Bids have not been advertised for, but will be shortly, and will be opened the middle of December.

WHITTIER, CAL.—Walter E. Butler, City Clk., states that owing to engineering difficulties it will be a few weeks before bids are asked on the proposed outfall sewer and septic tank. Length of sewer, 13,000 ft.

MELVILLE, SASK.—A. R. CUNNINGHAM, Melville, Sask., has been awarded contract for the construction of a system of sewers here at the following prices: Excavation, 25 cts. per lin. ft.; pipe laying, 5 cts. per lin. ft.; back filling, 7 cts. per lin. ft.; manholes, $45 without man tops; inlets, $2.50 each; connecting inlets, 32 cts. per lin. ft.

GARBAGE DISPOSAL.

NEW YORK, N. Y.—Bids are asked until noon, Dec. 3, by William H. Edwards, Comr. St. Cleaning for furnishing all the labor and materials required for the construction of a dumping board at the foot of Clinton Ave., Brooklyn, and for furnishing all the labor and materials required for the construction of a dumping board at the foot of 158th St., North River, Manhattan.

JERSEY CITY, N. J.—The Street and Water Board on Nov. 8 awarded contract to HENRY BYRNE for the removal of garbage and ashes for fiscal year, beginning Dec. 1 next, at $48,200.

ELWOOD CITY, PA.—The Borough Council has instructed Borough Engineer to prepare plans for the construction of a garbage disposal plant.

COLUMBUS, OHIO.—The contract for a loading station for the garbage reduction plant being constructed by the city was awarded recently to DANIEL McGRATH, of Columbus, at $13,605. The loading station is of brick, 40 × 90 ft., and equal to two stories in height. The other bids for the work were: Kolb & Son, $13,949; Francis Bros., $13,994; J. W. Heckart, $14,162; A. W. Schiender, $14,893; L. S. Steward, $16,278; Adam Pitts, $18,357.

LOS ANGELES, CAL.—CHARLES A. ALEXANDER has been awarded a contract by the city for garbage disposal for five years, at $48,000 per year.

STREETS AND ROADS.

PLYMOUTH, N. H.—Bids will be received until 5 p. m., Nov. 30, by A. W. Dean, State Engr., Concord, for grading and surfacing with gravel a portion of Merrimack Valley Road in the town of Plymouth. Estimated cost, $8,000.

PROVIDENCE, R. I.—Bids will be received until 2 p. m., Nov. 23, by the Board of Contract and Supply for furnishing and delivering for the Department of Public Works, f. o. b. cars at the city yard, S. Providence, about 8,000 sq. yds. granite paving blocks from quarries at or in the vicinity of Westerly, R. I., or Millstone, Conn.; alternate bids will be considered for 4,000 sq. yds. of such blocks from quarries at or in the vicinity of Hurricane Island, Me., to be delivered alongside dock at the city yard, Providence. Henry Fletcher is Mayor and Chn.

HARTFORD, CONN.—A supplemental contract for the construction of 1,544 lin. ft. of macadam road, 16 ft. wide on the New Britain-Plainville road has been awarded by the State Highway Commissioner to A. C. STERNBERG & SON, of West Hartford, Conn. The contract for repairing 2,400 lin. ft. of road, on the highway known as Armory Hill in the town of Norwalk has been awarded to OLMSTED & OLMSTED, East Hartford, Conn. Plans for 8,100 ft. of road work on the Talcott Mountain road, from West Hartford to Avon, has been prepared for the State Highway Department by E. R. Ingraham, Engr.

ALBANY, N. Y.—We are officially advised that the following is a list of state and county highways which have been designated to be advertised for contract during the winter of 1909 and 1910 by the State Commission of Highways, in the following counties which comprise Division No. 1, Headquarters, Poughkeepsie, N. Y.:

Dutchess County: State Highway, Route 1, Sec. 2, through Pawling Village, connecting the improved highway north and south of the village, 1.5 miles; State Highway, Route 2, Sec. 4, Casper Creek-Wappinger Falls, from the end of the macadam south of Poughkeepsie, to the corporation line of Wappingers Falls, 2.06 miles; County Highway, No. 628, Rock City-Lafayetteville, 4.66 miles.

Nassau County: State Highway, Route 35, Sec. 1, from New York city line, easterly, through Lakeville, toward Searington and Albertson Station, two miles; County Highway, No. 548, Berry Hill (part of), from Oyster Bay through Syosset to the Jericho turnpike, 4.78 miles.

Orange County: State Highway, Route 3, Sec. 6, from Newburg city line, northerly, toward Middle Hope, 3 miles; County Highway, No. 414, Scotts Corners-Burnside, through Maybrook, 5.67 miles.

Putnam County: State Highway, Route 1, Sec. 1, from Westchester county line, near Croton Falls, northeasterly, to Deans Corners on the Brewster road, two miles; County Highway, No. 798, Kent-Towners, connect-two improved highways and spur to Towners Station, 2.71 miles.

Rockland County: State Highway, Route 3, Sec. 5, Long Clove to Congers, 1.7 miles; County Highway, No. 728, State line-Orangeburgh, 2.82 miles, from state line north through Sparkville to Orangeburgh.

Suffolk County: State Highway, Route 35, Sec. 1, from end of macadam on Jericho turnpike at Nassau county line easterly toward Commack, 3.5 miles; County Highway, Sag Harbor-East Hampton, 5.37 miles.

Sullivan County: State Highway, Route 4, Sec. 8, Monticello-Liberty, Sec. 1, 2.5 miles, from Monticello corporation line, northwesterly, toward Bushville; County Highway, No. 823, Falls Mills-Callicoon, 4.84 miles.

Ulster County: State Highway, Route 3, Sec. 10, Saugerties-Kingston, Sec. 2, from Kingston city line, northerly, along West Shore R. R. to end of macadam, 3.23 miles; State Highway, Route 3, Sec. 3, from end of macadam, southerly, through Milton, 1.5 miles; County Highway, No. 330, Highland-Gardiner, Sec. 1, 7.32 miles, from macadam at Highland, westerly, through Clintondale.

Westchester County: State Highway, Route 1, Sec. 9, from Armonk, easterly, through Fosters Corners, and northerly toward Rundalls Corners and Bedford, 3.5 miles; County Highway, No. 775, Goldens Bridge-Croton Falls, 4.42 miles, from east end of bridge over Croton River, northerly, through Somers omitting part macadamized to the Putnam county line on the Brewster road; County Highway, No. 780, White Plains town line-Harrison, 2.91 miles, from the Mamaroneck River bridge, over North St. and Harrison Ave. to Summer St.; County Highway, Mt. Kisco Village, Main St., Bedford Road and Park Ave., 2½ miles, connecting four improved county highways.

Division No. 2, headquarters, Albany, N. Y.:

Albany County: State Highway, Route 7, Sec. 8, between Slingerlands and New Scotland, connecting macadam, and extending east to Bridge St., 2¼ miles; County Highway, No. 755, Altamont-Knox, 4.28 miles; County Highway, Altamont Village, 1.1 miles, connecting macadam east and west of Altamont and extending through the Village of Knox.

Columbia County: State Highway, Route 2, Sec. 2, from end of macadam at Blue Stores, northerly, toward Livingston, 2½ miles; County Highway, No. 762, Craryville-State line, 6.02 miles, passing through Hillsdale and Hillside.

Clinton County: State Highway, Route 22, Sec. 7, from the Plattsburg city line, near the U. S. Government reservation, southerly, pest Hotel Champlain toward Valcour, 2½ miles; County Highway, No. 776, West Plattsburg, 7.26 miles, from Tammers Corners, through West Plattsburg and Cadyville, to Elsinore.

Essex County: State Highway, Route 22, Sec. 20, from Ausable Forks, southerly, toward Jay, 3½ miles; County Highway, No. 821, Saranac Lake-Bloomingdale, 5.68 miles; County Highway, Crown Point-Port Henry, from Bigelow Corners, northerly, along lake shore to corporation line of Port Henry, four miles.

Fulton County: State Highway, Route 24, Sec. 1, Johnstown city line, south via Chestnut St., to Montgomery county line, 0.64 mile; State Highway, Route 24, Sec. 10, Northville corporation line, northerly, to Hamilton county line, 1.34 miles; County Highway, No. 542, School House-Caroga Creek, 2.69 miles, from the end of macadam beyond Cork, northerly, toward Shaw's Corners.

Greene County: State Highway, Route 3, Sec. 2, Catskill corporation line, south, toward Alsen, 2.5 miles; County Highway, No. 797, Hunter-Windham, Sec. 2, 3.39 miles, from Hensonville, westerly, through Windham Village.

Montgomery County: State Highway, Route 6, Secs. 17 and 16, from the Herkimer county line at East Creek, easterly, through St. Johnsville Village, 3.73 miles, (experimental section, with 34 different methods and kinds of surfacing); County Highway, No. 397, Canajoharie-Flat Creek-Blaine, 6.67 miles, from Canajoharie to Blaine, and from Fettingers Corners on same, easterly, to the town line of Root on the highway to Flat Creek.

Rensselaer County: State Highway, Route 1, Sec. 3, from Rice's Corners on the Schodack Center-Nassau macadam highway to and over the Post road, three miles; County Highway, No. 583, Couse-Lutner, 3.4 miles; County Highway, No. 631, Eagle Mills-Clums Corners, 2.25 miles.

Saratoga County: State Highway, Route 25, Sec. 13, from south end of Saratoga-Ballston macadam, southerly, through Ballston Village toward Ballston Lake, three miles; County Highway, No. 610, Mechanicville-Malto, 7.42 miles.

Schoharie County: State Highway, Route 7, Sec. 9, from Albany county line, near West Berne to Gallupville, 3.2 miles.

Schenectady County: State Highway, Route 6, Sec. 4, from Scotia toward Hoffman, 2.25 miles; County Highway, No. 789, Mariaville-Montgomery county line, 5.75 miles, from Featherstone Lake through Mariaville to the county line near Scotch Bush.

Warren County: State Highway, Route 25, Sec. 4, from the bridge over the Hudson River at Riverside, westerly, over a new location toward Weavertown, 1.5 miles; State Highway, Route 25, Sec. 14, Village of Lake George, from end of Glens Falls macadam to north corporation line on the Warrensburg road, 1.48 miles; County Highway, No. 804, Luzerne-Lake George, Sec. 1, 7.13 miles; County Highway, Lake George Village, from the end of the Bolton Road to join State Route, 0.17 mile.

Washington County: State Highway, Route 22, Sec. 8, from the north corporation line of Salem, northerly, toward Granville, on the Northern turnpike, three miles; County Highway, No. 724, Greenwich-Battenville, 3.98 miles.

Division No. 3, headquarters, Watertown, N. Y.:

Franklin County: State Highway, Route 30, Sec. 9, from the end of macadam at North Bangor, westerly, toward Brushton, three miles; County Highway, No. 820, Hogansburg-Bombay, 6.52 miles.

Herkimer County: State Highway, Route 26, Sec. 3, connecting macadam through Dolgeville Village, 2.06 miles; State Highway, Route 6, Sec. 6, East Albany St.-Herkimer Village, from end of macadam to power canal, 0.45 mile; State Highway, Route 6, Sec. 8, Mohawk St.-Herkimer Village, from pavement to the Mohawk River bridge, 0.4 mile; State Highway, Route 26, Sec. 9, Middleville Village, East Bridge St. to Main St. and North Main St. to end of macadam, 1.32 miles; County Highway, No. 466, Burrells-Middleville (west part of), 3.29 miles, from Little Falls-Fairfield highway near Barto Hill, westerly, to Middleville; County Highway, Herkimer Village-German St., from the Middleville macadam, southwesterly, to the Utica macadam, 1.95 miles; County Highway, Middleville Village, from the end of the Herkimer macadam, northerly, over Mohawk St. to join Route 26, Sec. 9, 0.65 mile.

Hamilton County: State Highway, Route 24, Sec. 1, from Fulton county line near Northville, northerly, along Sacandaga River, toward Hope Center, three miles.

Jeffersen County: State Highway, Route 27, Sec. 7, from Five Corners in Black River Village, westerly, to the city line of Watertown on the north side of the Black River, 4.28 miles, (experimental section, with 34 different methods and kinds of surfacing); County Highway, No. 565, Watertown-Theresa, Sec. 1, from the city line of Watertown to Pamelia Four Corners, 7.35 miles; County Highway, No. 624, Carthage-Wilna, 3.09 miles.

Lewis County: State Highway, Route 27, Sec. 7, from the corporation line of Lowville, southerly, toward Martinsburg, 2.5 miles.

Oneida County: State Highway, Route 6, Sec. 2, New Hartford Village, connecting macadam: State Highway, Route 28, Sec. 2, Whitesboro Village, from Utica macadam, westerly, to west corporation line; State Highway, Route 23, Sec. 5, Clayville Village, connecting macadam; State Highway, Route 6, Sec. 6, Vernon Village, connecting macadam; County Highway, No. 837, Waterville-Deansboro, 4.77 miles; County Highway, No. 838, Sauquoit, easterly from macadam, 0.56 mile; County Highway, No. 839, Augusta-Knoxboro, 1.21 miles.

St. Lawrence County: State Highway,

Route 30, Sec. 9, between Potsdam and Canton, five miles, between railroad crossing; County Highway, No. 735, Potsdam-Colton, 7.9 miles, passing through Hannawa Falls.

Division No. 4, headquarters, Syracuse, N. Y.:

Cortland County: State Highway, Route 10, Sec. 5, Village of Homer, connecting Cortland and Tully macadam, two miles; County Highway, No. 738, Cortland-Truxton, Sec. 1, 6.51 miles, from Cortland to the Truxton town line.

Cayuga County: State Highway, Route 6, Sec. 7, from end of macadam to Free Bridge, ¼ mile; State Highway, Route 11, Sec. 7, from Auburn city line, southwesterly, toward Fleming, 2¾ miles; County Highway, No. 686, Weedsport-Cato, 7.65 miles.

Chenango County: State Highway, Route 7, Sec. 5, from the west corporation line of Bainbridge Village, easterly, along the Susquehanna River toward East Guilford, four miles; County Highway, No. 664, Otselic-South Otselic, Sec. 1, 4.33 miles, from Otselic, southerly, through Otselic Center to join macadam; County Highway, No. 665, Oxford-McDonough, Sec. 2, 5.1 miles, from the Village of McDonough to the Village of East McDonough.

Madison County: State Highway, Route 6, Sec. 1, from Oneida county line at Oneida Castle, westerly, over Seneca Ave. to join macadam near Wampsville, 2.57 miles; County Highway, No. 811, Georgetown-Otselic, 2.39 miles; County Highway, No. 812, Canastota-South Bay, 4.84 miles.

Ontario County: State Highway, Route 6, Sec. 6, from end of macadam, northeasterly, over Lake Ave. to join pavement on Main St. in Village of Canandaigua, 1.1 miles; State Highway, Route 6, Sec. 12, from the Livingston county line at Bloomfield, easterly, toward Holcomb, 2.4 miles; County Highway, No. 637, Manchester-Victor, from the village of Manchester, westerly, to join Canandaigua-Victor macadam at Kerns Corners, 5.3 miles; County Highway, No. 638, Geneva, 1.02 miles, from the city line of Geneva, southwesterly, to join Halls Corners macadam.

Oswego County: State Highway, Route 30, Sec. 7, from the end of macadam between New Haven and Mexico, easterly, through Main St., Mexico, toward Prattham, 3.5 miles; County Highway, No. 661, Oswego, Fifth St.-Fruit Valley, 3.59 miles, from city line of Oswego, southerly, on Fifth St., 2.53 miles, and from macadam at Fruit Valley, southeasterly, 1.06 miles, to Rural Cemetery; County Highway, No. 746, Carleys Mills-Parish-Collosse (part of), from Hastings town line near Carleys Mills, northerly, to the corporation line of Parish, 1.1 miles.

Onondaga County: State Highway, Route 6, Sec. 7, from west end of macadam near Fairmount, westerly, to the top of Camillus Hill, three miles; County Highway, No. 555, East Syracuse-Chittenango, 7.79 miles, from East Syracuse, easterly, through Manlius Center and Mycenae, to the Madison county line.

Seneca County: State Highway, Route 6, Sec. 1, from the Free Bridge, southwesterly, toward Seneca Falls, three miles; County Highway, No. 323, Reservation-Ovid, 3.86 miles, from Lodi Four Corners, northerly, to Ovid corporation line.

Wayne County: State Highway, Route 20, Sec. 3, from the west side of the Montezuma Swamp, between Clyde and Savannah, easterly, toward Savannah, three miles.

Yates County: State Highway, Route 12, Sec. 1, from the Schuyler county line, one mile north of North Reading, northerly, toward Dundee, two miles.

Division No. 5, headquarters, Rochester, N. Y.:

Chautauqua County: State Highway, Route 4, Sec. 5, Falconer Village, from Jamestown city line, easterly, to macadam, one mile; State Highway, Route 4, Sec. 3, from east end of macadam, east of Falconer, easterly, toward Poland Center, 2½ miles; County Highway, Roberts, Secs. 1 and 2, from Dunkirk city line, southeasterly, to the Fredonia-Sheridan Road, 1.62 miles; County Highway, Brocton-Stockton, Sec. 1, from the corporation line of Brocton, southerly, 2.93 miles.

Cattaraugus County: State Highway, Route 4, Sec. 4, from the city line of Olean, northerly, toward Hinsdale, 3.24 miles.

Erie County: State Highway, Route 6, Sec. 4, connecting macadam through Williamsville Village, one mile; State Highway, Route 18, Sec. 5, two miles on Shore Road at 18-Mile Creek; State Highway, Route 18, Sec. 7, two miles southerly on Shore Road from Lackawanna city line; County Highway, Village of Blaisdell, connecting macadam, one mile; County Highway, Village of Hamburg, connecting macadam, one mile; County Highway, Aurora-Glenwood, Sec. 1, 2.01 miles, from end of macadam at Jewettville, southerly, through West Falls; County Highway, No. 731, Aurora-Glenwood, Sec. 2, 7.08 miles, from Sec. 1 near West Falls, southerly, to Glenwood.

Genesee County: State Highway, Route 6, Sec. 9, from end of macadam west of Batavia, westerly, 3½ miles on Buffalo Road (experimental, 34 different methods and kinds of surfacing); County Highway, Oak Orchard, Sec. 4, from north corporation line of Batavia, northerly, to Elba, 4.07 miles.

Livingston County: State Highway, Route 6, Sec. 7, from the Genesee county line east of Le Roy, easterly, to Caledonia, and northerly toward Mumford to the Monroe county line, 3.99 miles; County Highway, No. 715, Dansville-Mt. Morris, Sec. 2, connecting macadam with contract 714, 4.54 miles.

Monroe County: State Highway, Route 16, Sec. 2, from the Village of Scottsville, southwesterly, to the corner near Allen Creek, near Mumford, 5.8 miles; County Highway, No. 492, Lake-Sweden, from Sweden Center, southerly, toward Bergen to the Genesee county line and from Four Corners, one mile south of Brockport, westerly, toward Clarendon to the Orleans county line, 5.76 miles; County Highway, No. 494, East Henrietta-Rochester, 4.43 miles, from the Village of Henrietta, northerly, through Ridgeland to the macadam at West Brighton near the Rochester city line.

Niagara County: State Highway, Route 30, Sec. 7, from the corner near Cambria Station, south, to macadam, thence southerly, omitting construction to Shawnee, and from Shawnee, southwesterly and westerly, toward Walmore, 2.5 miles; County Highway, No. 729 (Part of), Shawnee-Cambria, from corners near Cambria Station, northerly, to the highway leading from Cambria Center to Modeltown, 2½ miles; County Highway, No. 740, Sanborn-Pekin, 2.75 miles.

Orleans County: State Highway, Route 30, Sec. 2, from the west corporation line of Holley, westerly, over Albion St., 2.5 miles; County Highway, No. 393, Oak Orchard, Sec. 2, 3.6 miles, from the five corners north of Albion, northerly, through Fair Haven to the town line of Carlton.

Wyoming County: State Highway, Route 16, Sec. 9, from the Genesee county line, south of Pavilion, southwesterly, on east side of railroad, through Pearl Creek, three miles; County Highway, from the south corporation line of Perry southerly to the north corporation line of Castile, 4.75 miles.

Division No. 6, headquarters, Binghamton, N. Y.:

Allegany County: State Highway, Route 16, Sec. 2, from the railroad crossing in Cuba Village, northerly, through North Cuba and northeasterly toward Black Creek, three miles; County Highway, No. 801, East Rushford-Gordonville Bridge, 4.68 miles, from the Gordonville Bridge northerly and easterly to Rushford and East Rushford toward the Village of Caneadea to the Caneadea town line.

Broome County: State Highway, Route 4, Sec. 8, from the east end of macadam, east of Binghamton, on the north side of the Susquehanna River, easterly, toward West Windsor, three miles; County Highway, No. 834, Kirkwood-River, 7.79 miles, from the east end of macadam, east of Binghamton, on the north side of the Susquehanna River, southerly, along said river through Riverside to the Pennsylvania state line.

Chemung County: State Highway, Route 4, Sec. 1, from the Tioga county line near Waverly, westerly, toward Chemung Village, 2.5 miles (mostly new location); County Highway, from the Village of Catlin, southerly, to the Big Flats-Horseheads macadam at a point about two miles west of Horseheads, 4.08 miles.

Delaware County: State Highway, Route 4, Sec. 11, from county line in Deposit, southeasterly, toward Hales Eddy, three miles.

Otsego County: State Highway, Route 5, Sec. 13, from the corporation line of Richfield Springs, southerly, along the west bank of Schuyler Lake toward Schuyler Lake Village, 3.5 miles; County Highway, No. 786, Cherry Valley-Roseboom, 3.76 miles, from the corporation line of Cherry Valley, southerly, to the four corners in Roseboom; County Highway, No. 787, East End, 0.47 mile, from the end of the brick pavement in the city of Oneonta, easterly, to join macadam.

Schuyler County: State Highway, Route 12, Sec. 4, Montour Falls-Watkins, two miles.

Steuben County: State Highway, Route 4, Secs. 3 and 4, from the west city line of Corning, westerly, through the Village of Painted Post and southwesterly toward Erwin, 3.5 miles; County Highway, Caton-Corning, from the city line of Corning near Gibson, southerly to Caton, six miles.

Tioga County: State Highway, Route 4, Sec. 11, from the Chemung county line, easterly, through Waverly, 2.73 miles.

Tompkins County: State Highway, Route 11, Sec. 5, from the Cayuga county line, southerly, over the Ridge Road through Lake Ridge toward Ludlowville, 2.5 miles; County Highway, No. 682, Ithaca-Dryden, Sec. 2, 3.95 miles, from the end of macadam near Etna, northeasterly, to the corporation line of Dryden; County Highway, No. 683, Dryden-Cortland, 3.85 miles, from the corporation line of Dryden northerly, to the south end of the Dryden-Cortland macadam. Irving J. Morris is Secy. Dept. of Highways, Albany.

MINEOLA (L. I.), N. Y.—Bids will be received until Nov. 22 by the Board of County Supervisors at Mineola for regulating, grading and macadamizing the highway known as Marcus Ave., town of North Hempstead, requiring about 26,000 sq. yds. macadam, 15,000 cu. yds. grading, etc. H. E. Hawkhurst is Engr., Westbury; William E. Luyster is Clerk. Noted on Oct. 28.

NEW YORK, N. Y.—Bids are asked by John F. Murray, Pres. of the Boro. of the Bronx, until 11 a. m., Nov. 30, for repaving with granite blocks on various streets in the Bronx.

NEW YORK, N. Y.—Bids are asked until 11 a. m., Dec. 1, by Bird S. Coler, Pres. Boro. Brooklyn, for regulating and repaving with wood block, asphalt and granite pavement in a concrete foundation the roadways of various streets.

Bids are asked until noon, Nov. 30, by George Cromwell, Pres. Boro. Richmond, for furnishing all the labor and materials required for regulating and repaving with vitrified brick pavement on a concrete foundation the gutters of Bement Ave., from Richmond Terrace to Cary Ave., and other streets, together with all work incidental thereto; for furnishing all the labor and materials required for constructing flag and cement sidewalks and reflagging Central Ave., between Arrietta St. and Hyatt St., and other streets, together with all work incidental thereto; for furnishing all the labor and materials required for constructing flag and cement sidewalks and reflagging Patten St., between Broad St. and Meadow St., and other streets, together with all work incidental thereto.

Bids are asked by the Park Board until 3 p. m., Dec. 2, for completing the contract of Frank J. Tyler, which was abandoned, for furnishing all the labor and materials necessary to construct and complete cement walks around Parade Ground Building, Prospect Park, Boro. Brooklyn, together with all the work incidental thereto.

Bids are asked by the Park Board until 3 p. m., Dec. 2, for furnishing, delivering and spreading loam on Speedway, Ocean Parkway, between Ave. J and Kings Highway, Boro. Brooklyn.

TRENTON, N. J.—Bids will be received until Nov. 23 by the County Board of Chosen Freeholders for furnishing material and resurfacing with warrenite or other similar pavement a portion of Liberty St. Frank J. Eppele is County Engr.; W. Scott Taylor is Dir.

ELIZABETH, N. J.—The contract for paving 4,700 sq. yds. with trap block pavement on Seventh St. has been awarded to PATRICK FAUGHNAN, 516 Washington Ave., at $8,424.

JERSEY CITY, N. J.—Bids for the reconstruction of the Plank Road, between the Hackensack and Passaic rivers, known as Section No. 1, of the proposed improvement project, were opened by the Joint Committee of Essex and Hudson Counties Freeholders at the court-house in Jersey City on Nov. 9. Proposals were also received for the construction of a bridge connecting the road at the Passaic River. There was a crowd of contractors on hand when the bids were submitted. The number of estimates received was seven for the road improvement and four for the bridge. In the specifications for the road work the proposals were based on a percentage basis, the engineers making 100%, equal to $333,270. William Baker, 137 South St., Jersey City, offered to do the work for 80% of this figure, or $266,616. Other bidders were Joseph Murphy & Sons, 88%; J. F. Shanley Co., 89%; Palisade Construction Co., 93%; Peter Hagany, 93.9%; Patrick Connolly, 99.5%; Thomas Harrington, 102.5%. Snare & Triest, 143 Liberty St., New York, were the lowest bidders on the bridge. In figuring on this construction two bids were submitted by each competitor, covering separate designs. The respective figures of Snare & Triest were $333,000 and $338,000. The other bidders were A. E. Sanford & Co., $344,000 and $367,000; F. R. Long & Co., $349,000 and $360,000; F. M. Stillman Co., $341,000 and $345,350. The bids were ordered tabulated and referred to the County Boards for approval.

READING, PA.—Bids will be received by the State Highway Dept., Harrisburg, until Nov. 22 for constructing 23,977 ft. of road in Berks County. Joseph W. Hunter is Comr.

LENOIR, N. C.—We are officially advised that the Lenoir & Blowing Rock Turnpike Co. is making a survey of a macadam road from Lenoir to Blowing Rock, 25 miles, to cost about $125,000. After the first ten miles are surveyed bids will be asked and contracts let. R. L. Gwyn, Lenoir, Secy.-Treas.; C. M. Miller, Salisbury, N. C., Engr.-in-Charge. Specifications will be ready in about a week. Noted on Nov. 4.

BURLINGTON, N. C.—BOWE & PAGE, of Charleston, S. C., have secured the contract for street improvement in Burlington, at $25,000.

JACKSONVILLE, FLA.—Bids will be received by the Board County Commissioners until Nov. 29 for $250,000 of road improvement bonds.

HUNTSVILLE, ALA.—The City Council has awarded the contract to R. S. BLOME CO., 79 Dearborn St., Chicago, Ill., for paving about 1½ miles of Holmes St. with granitoid block.

BIRMINGHAM, ALA.—The contract for 23,500 sq. yds. of brick paving was awarded Nov. 4 to the E. W. JORDAN CONTRACTING CO., at $1.84 per sq. yd. Maury Nicholson is City Engr.

*VICKSBURG, MISS.—Bids are asked by J. J. Hayes, Mayor, until 8 p. m., Dec. 6, for paving the following streets with vitrified brick, granitoid, bitulithic, asphalt, mineral rubber and creosoted wooden blocks: Walnut St., from First East to South Madison Sts., nine blocks; Drummond St., from Harris St. to Bowmar Ave., four blocks; Veto St., from Washington to Monroe Sts., two blocks. C. R. Twiss is City Engr.

The SOUTHERN PAVING & CONSTRUCTION CO., Chattanooga, Tenn., has secured the contract for paving with brick First North St., at $2.18 per sq. yd.

ST. CLAIRSVILLE, OHIO.—We are officially advised that bids were received at the office of the Commissioners of Belmont County Nov. 3 for grading and macadamizing (tar macadam) 1.96 miles of road in Flushing Township. Joseph C. Wonders is State Highway Comr., Columbus, Ohio. The contract has been let to MOORE & STRAIN, of St. Clairsville, at $9,143.

WARREN, OHIO.—Bids were received at the office of the Commissioners of Trumbull County, on Nov. 5, for grading and macadamizing and paving with brick 1.19 miles of road in Kinsman Township. Estimated cost of construction, $14,102. (Tar macadam or brick and water-bound macadam.) Joseph C. Wonders is State Highway Comr., Columbus, Ohio. We are officially advised that the contract has been let to J. S. WOODROW, of Warren, at $13,332.

STEUBENVILLE, OHIO.—We are officially informed that bids were received at the office of the Commissioners of Jefferson County on Nov. 4 for grading and macadamizing 1.33 miles of road (water-bound macadam) in Cross Creek Township. Estimated cost, $8,832. Joseph C. Wonders is State Highway Comr., Columbus, Ohio. The contract for Section 2, Wintersville Road, has been let to J. P. WARNICK, of Cadez, Ohio, at $7,965.

TOLEDO, OHIO.—Bids will be received until Nov. 23 by the Bd. Pub. Service (Reynold Voit, Secy.), for furnishing material and paving with either vitrified block, sheet asphalt, asphalt block or creosoted wood block, portions of South Main, Elizabeth and other streets.

CINCINNATI, OHIO.—On Nov. 10, the Board of Public Service let a number of contracts for street improvements. McCARTHY BROS., 2910 Woodburn Ave., secured the contract to pave Wilder Ave., from State Ave. to Glenway St., with brick and boulders, at $14,650; RUSSELL & JENNISON, has the contract to pave Rose Hill and Beechwood Aves., running westwardly from Reading Road, with wooden block, at $58,862, and WILLIAM SCULLY, JR., & BRO. has the contract to pave Russell Ave., from Eastern Ave., to Archer St., with brick, at $11,719.

The contract for improving that section of Gilbert Ave., at Peebles Corner, which is being widened, by paving with granite, and its tributary alleys, by paving with brick, has been awarded by the Board of Control to McCARTHY BROS., at $19,967.

The Board Public Service on Nov. 4 awarded the contract for paving with wood block Spring Grove Ave. to J. M. QUILL, at $89,698.

The permanent improvement of the Gurley Road, leading to Price Hill, at a cost exceeding $7,000, has been ordered by the County Commissioners. The L. DRACH CONSTRUCTION CO. has been awarded the contract to improve the New Richmond Pike at the Little Miami River, at a bid of $5,085. Plans and specifications were ordered for the improvement of the Stone Mill road at a cost of $8,676.

We are officially advised that bids were received on Nov. 12 by the Board County Commissioners at Cincinnati for improving the Cleves and Miamitown roads, Whitewater Township, as per Specification No. 975. The contract has been awarded to JOHN F. SHANKIN, Eastern Ave. and Carrel St., Cincinnati. Fred. Dreihs is Clerk.

CINCINNATI, OHIO.—A contract for paving has been let to the KIRCHNER CONSTRUCTION CO., Eighth and Plum Sts., at $328,567, and it is stated that granite is to be used. The estimate of J. H. Sundmaker, City Engr., was $423,230. There were nine bidders for the work, among them being James Agness, whose bid was declared defective; August Henkel and M. Sullivan's Sons Construction Co. Mr. Agness submitted a bid of $326,691, August Henkel, $361,768, and M. Sullivan's Sons' Construction Co., $345,711.20.

PERU, IND.—Bids are asked by the Commissioners of Miami County until Dec. 8 for the construction of the following free gravel roads: Road No. 1, Pipe Creek Township; length, 15,840 ft.; estimated cost, $11,575. Road No. 2, Jefferson Township; length, 6,646 ft.; estimated cost, $9,424. Township line road; length, 24,393 ft.; estimated cost, $19,250. Charles Griswold is County Audr.

ROCKVILLE, IND.—Bids will be received by the Commissioners of Parke County until 1.30 p. m., Dec. 7, for the construction of the Brockaway-Marshal gravel road in Wabash Township. H. A. Henderson is County Audr.

GREENSBURG, IND.—Bids are asked by the Commissioners of Decatur County until 1 p. m., Dec. 6, for the construction of a macadamized road in Fugit Township. Length of road, 10,660 ft. Frank E. Ryan is County Audr.

MUNCIE, IND.—Bids are asked by the Commissioners of Delaware County until 10 a. m., Dec. 8, for the paving with brick the Clark road in Center Township. Joseph E. Davis is County Audr.

VINCENNES, IND.—Bids are asked until 2 p. m., Dec. 7, by the Commissioners of Knox County for the construction of the following gravel roads: The Winkler road, 3,400 ft., in Busseron Township; the Winemiller road, 4,880 ft., in Busseron Township; the Clark road, 3,065 ft., in Busseron Township, and the Roach road, 4,315 ft., in Busseron Township. J. T. Scott is County Audr.

FOWLER, IND.—Bids are asked by Lemuel Shipman, Audr. of Benton County, until 1 p. m., Dec. 7, for the construction of 16 rock roads in Benton County. Plans and specifications will be sent to bidders on application.

HARRISON, IND.—Bids will be received until Nov. 30 by the Board of County Commissioners for furnishing material and constructing nine gravel roads in Pipe Creek Township, to be 5,340, 3,464, 9,580, 10,637, 2,602, 5,156, 5,191, 3,957 and 5,318 ft. in length, respectively; also a gravel road in Monroe Township, 15,821 ft. in length. William T. Richards is County Audr.

CRAWFORDSVILLE, IND.—Bids will be received until Dec. 7 by the Board of County Commissioners for constructing a highway in Madison Township. B. B. Engle is County Audr.

BOONVILLE, IND.—Bids will be received until Dec. 6 by the Board of County Commissioners for constructing three gravel roads. Ray F. Cherry is County Audr.

LOGANSPORT, IND.—Bids are asked until 10 a. m., Dec. 7, by the Board of Commissioners of Cass County for material and labor for laying a new sidewalk on the east side of the Cicott St. bridge across the Wabash River. George W. Cann is County Audr.

MADISON, IND.—Bids are asked by the Commissioners of Jefferson County until 1 p. m., Dec. 7, for the improvement by grading, draining, paving and macadamizing a road in Monroe Township, Jefferson County, as petitioned for by J. A. Lilk, the length of the road being 5.59 miles and the estimated cost $7,844. G. F. Crozier is County Audr.

CHICAGO, ILL.—Bids will be received until Nov. 23 by Albert F. Keeney, Pres. Bd. Local Improvements for constructing 6-ft. cement sidewalks on portions of West Dakin, South Halstead and West George Sts., Ave. H, Humboldt and Oakdale Aves., and 14-ft. cement sidewalks on a portion of Wells St.

About four blocks of La Salle St. will be paved next year with concrete block, about 4,000 sq. yds.

*BELLEVILLE, ILL.—Bids will be received by the Board of Local Improvements until 1 p. m., Nov. 23, for about 50,000 sq. yds. brick pavement on Portland cement concrete foundation, 30,000 lin. ft. curb and about one mile of sewer. Fred. J. Kern is Pres.

MILWAUKEE, WIS.—The Board of Public Works has awarded the contract for Kettle River sandstone paving on Martin St., from Market St. to Broadway, to HASE & WEIHER, Milwaukee, at $3.06 per sq. yd.

The Board of Public Works has awarded the contract for asphalt paving on Highland

Boulevard, from Vliet St. to the Highland Boulevard viaduct, to the BADGER CONSTRUCTION CO., Railway Exchange, Milwaukee, at $2.08 per sq. yd. Total, $19,362.

BELOIT, WIS.—This city contemplates laying about 50,000 sq. yds. paving, it is stated. Robert Caldwell is City Engr.

ST. PAUL, MINN.—FIELDING & SHEPLEY, 216 University Ave., have been awarded by the Board of Public Works, the contract for paving with vitrified brick East Tenth St., from Wabasha to Jackson St., at a cost of $15,378. They were the lowest bidders. The material to be used is brick. Work probably will not be begun this fall. W. L. Rundlett is City Engr.

DALLAS, TEX.—The TEXAS BITULITHIC CO. has secured the contract for paving with brick Poydras St., from Commerce to Young Sts., at $2.27 per sq. yd., or a total of $6,538.

OKLAHOMA CITY, OKLA.—On Nov. 1 awards were made by City Council for paving, as follows: CLEVELAND TRINIDAD PAVING CO., 420 Lakeside Ave., N. E., Classen Boulevard, $101,244; Durland Ave., $13,373; Laird Ave., $13,507; Oklahoma Ave., $8,188; Flynn, Barnes and 20th Sts., $23,412; Robinson Ave., $82,792; 21st and 22d Sts., $12,348; Tenth St., $10,378; Hudson Ave., $98,407; Lindsey Ave., $10,153, and 34th St., $25,255; Third St., $14,624.

Bids are asked until 5 p. m., Nov. 22, by the Mayor and Council for grading the following streets: Military Ave., from the north line of 29th St. to the north line of 33d St.; Lake Ave., from the north line of 30th St. to the souh line of 33d St.; 33d St., from the east line of Classen Boulevard to the west line of Classen Boulevard to the west line of Western Ave.; 30th St., from the east line of Classen Boulevard to the west line of Western Ave.; 29th St., from the west line of Military Ave. to the west line of Western Ave., and Ellison Ave., from the north line of Tenth St. to the south line of Holly St.; Jamestown St., from the west line of Klein Ave. to the west line of Summers Place Addition; Orr St., from the west line of Klein Ave. to the west line of Summers Place Addition; Carroll St., from the west line of Klein Ave. to the west line of Summers Place Addition; Panama St., from the west line of Klein Ave. to the west line of Summers Place Addition, and Western Ave., from the north line of 23d St. to the north line of 33d St., and 31st St., from the west line of Georgia Ave. to block west of Park Ave.; 32d St., from the west line of Georgia Ave., to block west of Park Ave., and that each be graded the total width of said streets from property line to property line. Bob Parman is City Clerk; W. C. Burke is City Engr.

SPOKANE, WASH.—Press reports state that official announcement was made by Henry L. Bowlby, State Highway Commissioner, Olympia, at a conference in Spokane with Frederick H. Mason, President of the Spokane Good Roads Association, the Commissioners of Spokane County and local business men, that $1,000,000 will be expended on state and state-aid roads in eastern Washington, work to begin as early as possible the coming spring. The Commission has a state appropriation of $124,000 to provide five rock crushers to be installed.

VENTURA, CAL.—Property owners of Ventura, Cal., will spend $7,000 to improve the Beach Road, between Ventura and Santa Barbara, Cal. Casitas Boulevard also will be rebuilt.

SALT LAKE CITY, UTAH.—Bids will be received until Nov. 19 by the Board of Public Works for grading, curbing and paving Ninth East St., and constructing cement sidewalks in Sidewalk Extension No. 136. George C. Chaney is City Engr.; H. G. McMillan is Chn. Bd. of Public Works.

CALDWELL, IDAHO.—The following are the bids opened Oct. 29 for about 30 blocks of bitulithic pavement: WARREN CONSTRUCTION CO., Lumber Exchange, Portland, Ore., $125,785 (awarded contract); Pacific Bridge Co., Portland, Ore., $127,769, and Strange & Maguire, Salt Lake City, Utah, $130,500. F. H. Richardson, Caldwell, is Engr. Noted last week.

MANUFACTURING PLANTS.

(* *denotes that this work is advertised in Engineering News.*)

FALL RIVER, MASS.—The management of the Bourne Cotton mills has decided to build an addition to the No. 1 mill in which will be installed preparatory machinery. The addition will be 105 × 40 ft., three stories high and will cost about $15,000.

SOUTH NORWALK, CONN.—The J. & J. Cash Co., manufacturer of textiles, is planning to expand its American branch plant, which is located on Chestnut St.

EAST HAMPTON, CONN.—It is planned by the Summit Thread Co., East Hampton, to equip its plant with automatic sprinklers. A tower, 100 ft. tall with two tanks, one holding 20,000 gallons for use in the dye-house and a larger one holding 40,000 gallons for fire purposes, will be erected west of the company's dye-house. The foundation for the piers is now being laid.

SYRACUSE, N. Y.—The Brennan Motor & Mfg. Co. will build at Grape and Water Sts., a 2-story and basement factory addition, 30 × 100 ft., of brick and stone. Charles D. Wilsey, Nottingham Bldg., is Arch.

UTICA, N. Y.—The Utica Fine Yarn Co., has awarded contract for erection on Erie St., West Utica, of a yarn mill, 105 × 124 ft., three stories, with wing 30 × 72 ft., to GEORGE W. SHIPPEY, 128 Elizabeth St. The C. R. Makepeace & Co., Providence, R. I., are Archs.

BUFFALO, N. Y.—The Buffalo Foundry & Machine Co., H. D. Miles, Pres., East Ferry St. and Fillmore Ave., is having plans prepared by Robert J. Reidpathe, Arch., 30 Builders Exchange, for a 1 and 2-story foundry and machine shop, 100 × 310 ft., of steel frame, expanded metal and concrete construction to be erected at East Ferry St. and the New York Central R.R. Belt Line. Cost, $75,000.

BUFFALO, N. Y.—The Buffalo Co-operative Stove Works, Edward Kener, Mgr., will erect a 2-story brick and steel fireproof addition, 50 × 97 ft., to its plant at Amherst St., and the New York Central R. R. Louis P. J. Eckel, is Arch., 191 York St. The same company is having plans prepared for a warehouse to be erected next spring.

The Buffalo Foundry & Machine Co., Henry D. Miles, Pres., East Ferry St., and Fillmore Ave., will build a 1 and 2-story machine shop, 100 × 310 ft., steel frame, expanded metal and concrete at East Ferry St. and the New York Central R. R. Belt Line. Cost, $75,000. Robert J. Reidpath, 30 Builders' Exchange, is Arch.

A contract has been awarded to J. H. TILDEN & CO., 14 Henry St. for erection of a 5-story and basement warehouse and factory, 45 × 110 ft., at the corner of South Division and Elm Sts., for Nathan Gutman & Co., 56 Pearl St., H. Osgood Holland, 417 Pearl St., is Arch.

SONYEA, N. Y.—We are officially advised that bids were received by Percy L. Lang, Pres. Bd. of Mgrs. of the Craig Colony of Epileptics, at Sonyea, N. Y., on Nov. 9, for a 2-story addition to laundry, including construction, heating, plumbing and electric work; also for construction of new retaining wall. F. B. Ware is State Arch., Albany. The contract has been let to FOOTE BROS., Mount Morris, N. Y., at $13,300.

NEW YORK, N. Y.—Plans have been filed for the American Bank Note Co.'s building, to be erected on the block bounded by Garrison and Lafayette Aves., Tiffany and Barretto Sts., in the Bronx. The plans which have been prepared by Kirby, Pettit & Green, Archs., 103 Park Ave., call for a group of three buildings, four and five stories in height, of brick and limestone. The structure is to cost $400,000. Ground was broken several weeks ago, and the foundation work is to be started at once. Warren L. Green is Pres., 70 Broad St.

The New York & North Shore Traction Co., proposes to build car barns and also a power-house, it is stated, which will supply power to the new trolley line from Whitestone Landing to Flushing and the road connecting Nassau and Queens counties. A site has been purchased at Bayside Meadows, L. I. George B. Thomas is Gen. Mgr., Roslyn, N. Y.

PASSAIC, N. Y.—The R. & J. Dick Co. of Glasgow, Scotland, a belting manufacturing concern, will erect a factory in New Jersey. The firm has purchased two acres near the Passaic city line, on the Delaware, Lackawanna & Western R.R., between Clifton Station and Passaic, through Frank Hughes, of Ohio city, and has engaged the J. J. O'LEARY CO., 319 Main St., Paterson, N. J., to execute its plans, which have been prepared by Andrew Barclay, of Glasgow. A factory building covering an area 200 × 250 ft. and a power house measuring 50 × 90 ft. will be built, as well as a number of outbuildings. Work has been begun on the excavations, and the plant may be ready for operation early next spring.

JERSEY CITY, N. J.—It is stated that at Communipaw Ave. and Woodward St., W. Ames & Co., 312 Washington St., Jersey City, will erect a fireproof brick and reinforced concrete plant, consisting of bolt and spike shop, 40 × 100 ft.; blacksmith and machine shop, 50 × 100 ft.; storage building, 20 × 40 ft., and an office 31 × 42 ft. All the buildings will be one story high, except the office, which will have two stories. C. H. Higgins, 15 Exchange Pl., Jersey City, is Arch. The owner is taking estimates.

LEBANON, PA.—The managers of the American Iron & Steel Mfg. Co., have given their sanction to a plan for erection here of a steel billet mill. The mill will be built without delay. The plant with machinery will involve an expenditure of more than $500,000. It is stated that steel billets will be manufactured by electrical process.

PHILADELPHIA, PA.—Thomas Potter Sons & Co., Inc., oil cloth manufacturers, 522 Arch St., have purchased from the Pennsylvania R.R. Co., a tract of ground comprising about ten acres on the northwest side of Erie Ave. The ground will be used as the site for an addition to the plant.

D. W. O'Dea, of Philadelphia, has a contract to build a 2-story addition 48 × 80 ft., to the Wolstencroft Felt Co.'s plant, at the southwest corner of Bridge and Charles Sts., to cost $8,000.

RUTHERFORDTON, N. C.—The Cleghorn Mills Co., of Rutherfordton, N. C., has applied for a charter of incorporation, the capital stock being $200,000. Its incorporators are J. C. Mills, R. P. Scruggs, Jr., and a number of others. They will determine soon plans for the plant and arrange for buildings and machinery. Other incorporators are Collet L. Miller, W. A. Dickerson, S. A. Gallert and A. F. Miller, of Rutherfordton.

THOMASVILLE, N. C.—The Amazon Cotton Mills Co., of Thomasville, N. C., has awarded contract to THOMPSON BROS. of Charlotte, N. C., for the erection of its mill building and reservoir, the two to cost about $30,000. Construction will begin at once, and be pushed to completion as soon as possible. The Amazon enterprise is to be owned by James F. Cannon and associates, of Concord, N. C., and other cities, operators of a number of cotton factories. Charles G. Hill, of Winston-Salem, N. C., is Treas. Details as to size of building, number of spindles and looms, etc., have not been announced.

YAZOO CITY, MISS.—The Municipal street railway expects to build a small addition to its car house, 80 × 12 ft. soon. G. W. Pocklington is Supt. of Constr.

CLEVELAND, OHIO.—The U. S. Steel Corporation will spend $3,000,000 in improvements at its Cleveland plants, it is stated.

A new $50,000 foundry building will be constructed by the Superior Foundry Co. at East 71st St., and the New York, Chicago & St. Louis Ry. (Nickel Plate) tracks. An application for a permit has been made at the building inspector's office. The building will be 281 ft. long and 50 ft. wide, and will be two stories high. It is to be fireproof, of concrete and steel construction. Rider & Son are Archs.

CINCINNATI, OHIO.—A printing plant addition, seven stories high, to cost $100,000, is to be erected on Walnut St., near Sixth St. Samuel Hannaford & Sons, Hulbert Block, are Archs.; the Cincinnati Times-Star Co. is owner. Charles Taft, Pres., Sixth and Walnut Sts.

HAZELTON, OHIO.—The Mahoning & Shenango Railway & Light Co., Youngstown, Ohio, is preparing plans for improvements to its car house at Hazelton. A sand house will be erected which will have a capacity of three carloads of sand. A paint shop will also be erected in the near future and the yards and tracks are to be extended from the west end of the car house a distance of about 300 ft. At least ten tracks will be extended approximately that distance.

GIRARD, OHIO.—According to press reports plans are being prepared by the Carnegie Steel Co., Carnegie Bldg., Pittsburg, Pa., for improvements in its Girard plant which, when completed, will increase the finishing capacity of that property 30,000 tons a month. The company recently secured 265 acres of ground adjoining its former holdings and also close to the Ohio works at Youngstown, upon which new mill buildings are to be erected, and it is expected that the extension will be partially in operation during 1910. The Girard properties, were originally the plant of the American Steel Hoop Co., and were later taken into the Carnegie organization. Ultimately, it is stated, the mills will be increased in capacity to 60,000 tons of finished material a month.

NILES, OHIO.—The contract for the erection of the new plant of the Stanley Co. has been awarded to the WESTERN RESERVE LUMBER CO., of Warren, Ohio. The plans call for six buildings which in all will cover an area of 250 × 212 ft. The contractor will do all the work in the line of wood construction and the structural steel parts will be erected by a Pittsburg firm. E. H. Vaughn of Warren, is Supt. of Constr.

ELKHART, IND.—Burrell & Morgan have announced that they would soon increase the capacity of the city mill by erecting an addition.

MOROCCO, IND.—The Rich Bros., will ask for bids soon for the construction of a mill and elevator on the site of the mill and elevator recently destroyed by fire.

TERRE HAUTE, IND.—Announcement is made by officials of the Engineering Department of the Pennsylvania R.R. Co., it is stated, that car and machinery shops to cost $2,000,000 are to be erected here and their construction will begin in the spring. The company has purchased a tract of 120 acres east of the city and extensive yards will be laid out. Alexander Shand, Philadelphia, is Ch. Engr.

BUFFINGTON, IND.—The U. S. Steel Corporation will expend $500,000 for a universal Portland cement plant at Buffington, Ind., to double the size of its present plant. It will then have a capacity of 6,000,000 bbls. a year. The plant is between Indiana Harbor and Gary. Work will begin in the spring. The plant now absorbs all the Illinois Steel Co.'s slag at South Chicago, and will use up all the slag of the Indiana Steel Co. at Gary.

INDIANA HARBOR, IND.—Announcement is made that the McClintic-Marshall Construction Co., Park Bldg., Pittsburg, Pa., has bought 50 acres at Indiana Harbor to build a $500,000 plant for the manufacture of structural steel. The plant will be finished within a year, will have an annual capacity of 70,000 tons, and will employ 1,200 men.

INDIANAPOLIS, IND.—The Star Motor Car Co., Guy G. Shaw, Pres., will ask for bids soon for the erection of a factory plant. George W. Bedell, Law Bldg., is Arch.

INDIANAPOLIS, IND.—The Holliday & Wyon Co. has purchased a site at the northeast corner of Ohio and West Sts., on which it will erect a factory and wholesale building. The company is engaged in the wholesale saddlery and harness business, and its present location is 134 and 138 South Pennsylvania St. The property purchased has a frontage of 100 ft. in West St., and is 195 ft. in depth. The first building to be erected on the ground will be a 3-story concrete building for factory purposes. The rest of the improvements will follow soon after. In addition, the company will engage in the manufacture of automobile tops and parts at the new location.

SOUTH BEND, IND.—The Studebaker E. M. F. Co. announces that it will build and equip a $400,000 automobile factory at Walkerville. Plans are now being made.

CHICAGO, ILL.—The Weller Mfg. Co., 118 North Ave., will erect a big plant at the southwest corner of North 44th Ave. and Cortland St., the project representing an investment of $140,000. The company has purchased from the estate of David M. Hamilton the vacant tract of eight acres at that place fronting 556 ft. on North 44th Ave. and 600 ft. on Cortland St. for $15,000 and will begin the construction of a plant for the manufacture of elevating and conveying and power transmission machinery soon. The buildings and equipment representing an investment of $125,000.

The Chicago Ornamental Iron Co. has purchased two pieces of property adjacent, and will enlarge its works. One is on 37th St., 37 ft. east of Stewart Ave., 18 × 150 ft., with a south frontage, and was bought from John J. Downey. The other is at the northeast corner of 37th St., and Stewart Ave., and is irregular, being divided by the land purchased from John D. Downey. The second purchase was from Mary Peacock and others, and measures 516 × 57 × 183 × 543 ft., the two pieces together making a solid tract, 233 × 543 × 516 ft. The company will spend about $30,000 to $40,000 soon in the erection of one or two buildings as an extension of the plant.

The Davies Supply Co., manufacturers and jobbers in iron pipe and fittings, now at 20 to 32 North Clark St., have closed a lease for a building to be erected at 57 to 69 Ontario St., between Orleans and Kingsbury Sts., now occupied by the Cribben & Sexton Co., stove manufacturers. This property has a frontage of 175 ft. and depth of 100 ft., and is served in the rear by the St. Paul railroad. The improvements will approximate in value $35,000 to $40,000.

MILWAUKEE, WIS.—The K[illegible] Furniture Co., 33d and Clark Sts., Milwaukee, has awarded contracts for the erection of a $30,000 factory building as follows: Mason and concrete, CONRAD RAULF, JR. CONSTRUCTION CO., Patton Bldg., Milwaukee. Van Ryn & DeGelleke, Caswell Block, Milwaukee, are Archs.

DELAVAN, WIS.—The Bradley Knitting Co. has engaged architects to prepare plans for a warehouse, a spinning plant, and a box factory, to be erected during 1910.

ST. PAUL, MINN.—Buechner & Orth, Archs., Manhattan Bldg., city, have awarded the contract for the excavation and foundation for an 8-story manufacturing building for A. J. Nason, Pres. of the Manhattan Investment Co., city, to J. H. NICKEL, 614 Endicott Bldg. Bids will be asked soon for the superstructure. It will be 50 × 140 ft., of reinforced concrete fireproof construction, with two electric elevators, steam heating, etc. Cost, $75,000.

ST. LOUIS, MO.—The Loughman Cabinet Co., 105 South Seventh St., has bought 3[illegible] ft. along Rutger St., between Ranken and Theresa Ave., where it will build a 3-story brick factory, to cost about $50,000. The ground was purchased from W. J. Barnes Realty & Building Co. Each part of the machinery being driven by individual motors. The plans for the building will be placed on the market the latter part of this month, and work will be begun in December.

TACOMA, WASH.—The Pacific Mfg. Co. has bought site and will build a factory costing $50,000 for the manufacture of sash, doors and interior finish.

SAN DIEGO, CAL.—The Borden-Billings Concrete Culvert Mfg. Co., has been incorporated at San Diego, Cal., with capital stock of $25,000, to manufacture the Borden 3-piece culvert and cement pipe.

LONG BEACH, CAL.—The Los Angeles Switch & Signal Co. of Los Angeles, has concluded arrangements with the directors of the Chamber of Commerce of Long Beach, Cal., by which the company will establish a plant. Two factory buildings will be erected at a cost of $12,000.

CAMP VERDE, ARIZ.—J. H. Wingfield of Camp Verde, will install an ice and cold storage at Camp Verde.

MONTREAL, QUE.—The Montreal Steel Works, Ltd., St. Patrick and St. Chienne Sts., have purchased a site adjoining the C. N. R. at Longue Pointe with a view to the erection of a plant soon.

TORONTO, ONT.—Douglas Bros., sheet metal workers, Colony St., Winnipeg, Man., have purchased a manufacturing site on Seventh Ave. and Bridge St. Estimated cost of plant, $100,000.

HAMILTON, ONT.—Morley P. Eager, 187 Main St., West, has had plans prepared for erection of a brick factory on King St., between Bay and Caroline Sts., to cost $7,500.

It is stated that the Hamilton Steel & Iron Co. intends to enlarge its plant. This will include building a bolt and bar mills and will mean an expenditure of $1,000,000. C. S. Wilcox is Pres.

FRANK, ALTA.—The Canadian-American Co. are planning to construct a new plant and build coke ovens to cost about $400,000.

VANCOUVER, B. C.—The contract to erect the proposed brewery near Arbutus St. and Tenth Ave., has been awarded to ATKINSON & DILL, for $150,000.

The Brackman-Ker Milling Co., 36 Hastings St., West, has purchased the McLennan & McFeeley property on Pender St. for $100,000, and is contemplating the erection of buildings.

MISCELLANEOUS CONTRACTS.

(* *denotes that this work is advertised in Engineering News.*)

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

DREDGING. — Urbana, Ohio. — Bids will be received by C. D Russell, County Audr., until Nov. 20 for constructing 269,489 cu. yds. of dredge work.

*DREDGING.—Wilmington, Del.—Bids are asked by Capt. L. H. Rand, Corps of Engrs., U. S. A., until 10 a. m., Dec. 13, for dredging Alloway Creek, N. J.

DITCH.—Olivia, Minn.—Bids will be received by J. L. Johnson, County Audr., until Nov. 18 for digging and constructing judicial ditch No. 4. Estimated cost, $14,233.

DITCH.—Lake Benton, Minn.—Bids will be received by R. H. Sisson, County Audr., until Nov. 23 for digging and constructing judicial ditch No. 22. Estimated cost, $5,197.

DREDGING.—Lynn, Mass.—Bids will be received until Nov. 19 by the Board of Harbor and Land Commissioners, Boston, for dredging an anchorage basin and entrance channel in Lynn Harbor.

LEVEE.—Helena, Ark.—Bids are asked by the Commissioners of Cotton Belt Levee District No. 1, Greenfield Quarles, Secy., until Nov. 25 for construction of 100,000 cu. yds. of levee work.

PIER.—Philadelphia, Pa.—Bids will be received until noon, Dec. 10, by Jos. F. Hasskarl, Acting Dir., Dept. Wharves, Docks and Ferries, for constructing substructure of Vine St. pier No. 19, North, Delaware River.

DREDGING.—New York, N. Y.—Bids are asked by Bird S. Coler, Pres. Boro. of Brooklyn, until 11 a. m., Nov. 24, for dredging Gowanus Canal, from the head to Station 14, about 12,600 cu. yds., scow measurement.

LEVEE.—New Orleans, La.—Bids will be received until Dec. 8 by Maj. H. Burgess, Corps Engrs., U. S. A., 3338 St. Charles Ave., New Orleans, for constructing about 50,000 cu. yds. earthwork in the Ponchartrain Levee District.

LEVEE.—Charleston, Mo.—Bids will be received until Nov. 27 by N. B. Kavenaugh, Secy., Levee Board at Charleston, for constructing eight miles of levee in Scott County; about 175,000 cu. yds. A. J. Wheeler, Engr., Charleston.

CRIB STONE.—New York, N. Y.—Bids are asked until 3 p. m., Dec. 2, by the Park Board for furnishing, delivering and putting in place crib stone in bulkhead at foot of Ocean Parkway, in the Boro. of Brooklyn. Henry Smith is Pres.

FENCE, ETC.—Boston, Mass.—Bids will be received at the office of the Charles River Basin Commission until Nov. 22 for furnishing and erecting a c.-i. fence and two flights of iron stairs on the Charles River Dam in Cambridge and Boston.

PAINTING, ETC. — Baltimore, Md.—Bids are asked by the Department of Public Improvements, Harbor Board, until 11 a. m., Nov. 24, for hauling and painting the bottom of the tugboat "Baltimore." O. F. Lackey, Harbor Engr.

LUMBER.—Otisville, N. Y.—Bids will be received by the Board of Health, New York, until Nov. 23 for furnishing and delivering timber, lumber, molding, etc., to the Tuberculosis Sanatorium at Otisville, Orange County, N. Y., during the year 1909.

DREDGING.—New York, N. Y.—Bids are asked by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., Dec. 4, for dredging at the navy yard, New York. Specifications are on file at office of Engineering News, New York.

MOTOR LAWN MOWERS.—New York, N. Y.—Bids are asked by the Park Board until 3 p. m., Dec. 2, for furnishing and delivering three gasolene motor lawn mowers in Prospect Park, Borough of Brooklyn. Henry Smith is Pres.

HOOK AND LADDER TRUCKS—New York, N. Y.—Bids will be received by the Fire Department, until 10.30 a. m., Nov. 23, for furnishing and delivering two 65-ft. aerial hook and ladder trucks, Boro. Manhattan; and three 65-ft. aerial hook and ladder trucks, Boro. Brooklyn.

FIRE HOSE.—Washington, D. C.—Bids will be received by the District Commissioners until 2 p. m., Dec. 1, for furnishing the District of Columbia with 15,000 ft., more or less, 2½-in. cotton-covered rubber-lined hose during the remaining portion of the current fiscal year.

*DISCHARGE PIPE LINE.—St. Louis, Mo.—Bids are asked until noon, Dec. 7, by Lieut. C. H. Knight, Corps of Engrs., U. S. A., and Secy. Mississippi River Comn., Liggett Bldg., St. Louis, for furnishing 24-in. discharge pipe line and special fittings for suction pipes for suction dredge.

*DITCH.—Clinton, Ill.—Bids were received by the Nixon Special Drainage Commissioners, at Clinton, on Nov. 13, for cleaning and enlarging main ditch and lateral No. 1. Estimated quantity, 107,000 cu. yds. W. J. Day, Engr., Bement, Ill. The contract has been let to C. W. BEEKER & SON, of La Fayette, Ind.

DREDGING, JETTIES.—Boston, Mass.—Bids will be received until Nov. 26 by the Board Harbor and Land Commissioners, Boston, for dredging a channel and turning basin at the entrance to Cuttyhunk Pond or inner harbor, requiring the dredging of about 69,500 cu. yds., scow measurement.

Bids will be received same time and place for strengthening and extending the stone jetties at the mouth of Herring River at West Harwich, requiring the furnishing and placing in position of about 3,000 tons of quarry grout and chips.

DITCHES.—Tallulah, La.—Bids will be received until 2 p. m., Nov. 20, for the construction work of the Canal Bayou Drainage District of Madison Parish, Louisiana. The work includes two separate ditches, as follows: Cross Bayou—Length, 21,500 ft.; fall, 1½ ft. per mile; side slopes, ½ to 1; depth, 8 ft.; bottom width, 10 ft.; yardage, 44,672. Canal Bayou—Length, 44,000 ft.; fall, 1½ ft. per mile; side slopes, ½ to 1; depth, 7 to 10 ft.; bottom width, upper half, 10 ft.; lower half, 18 ft.; yardage, 215,720. Total estimated cost of the work at 12½ cts. per yard is $32,550. J. T. McClellan is Pres., Levee Bd., Tallulah, La.

U. S. POSSESSIONS.

CRANES.—Panama.—The General Purchasing Officer, Washington, D. C., has awarded contract for furnishing one 20-ton locomotive coaling crane to ORTON & STEINBRENNER, Chicago, Ill. at $12,670.

WATER SUPPLY.—Philippines.—Bids will be received by the Municipal Board of Manila until 11 a. m., Dec. 29, for installing the distribution system of the Manila gravity water supply. A deposit of 10,000 pesos, Philippine currency, (about $5,000) will be required with each bid.

LUMBER.—Panama.—Bids were received as follows on Nov. 15, by the General Purchasing Officer, Isthmian Canal Commission, Washington, for the furnishing of a quantity of lumber, yellow pine or Douglas fir: A. S. Bacon & Sons, Savannah, Ga., $32,831; 140 days. Chicago Lumber & Coal Co., St. Louis, Mo., $28,527; 89 days. G. Elias & Bro., Buffalo, $29,611; 100 days. D. L. Gillespie & Co., Pittsburg, $28,597; 100 days. W. R. Grace & Co., San Francisco, $28,305; 105 days. J. K. Joice, Chicago, $35,700; 75 days. Salmen Brick & Lumber Co., New Orleans (part), $25,812; 90 days. Bay Shore Lumber Co., Mobile, Ala., $29,000; 45 days.

CONTRACT PRICES.

(* *denotes that this work is advertised in Engineering News.*)

LIFT BRIDGE.—Utica, N. Y.—Bids were received on Nov. 4 by F. C. Stevens, Supt. Public Works, for the construction of a lift bridge over the Erie Canal at Seneca St., Utica. Bidders were: Henry Tosh & Son, Port Byron, N. Y., $17,293; N. D. Peters Co., Utica, N. Y., $15,991; W. J. Burns Co., Syracuse, N. Y. (informal); Engineer's estimate, $15,473. The itemized prices of the lowest bid and the Engineer's estimate are as follows: (A) Engineer's estimate; (B) N. D. Peters Co., Utica, N. Y.:

1,400 cu. yds. excavating	$1.10	$1.05
450 cu. yds. forming embankment	.20	.25
75 cu. yds. lining	1.50	1.45
50 cu. yds. puddle	2.00	1.60
320 cu. yds. 2d class concrete	9.50	9.00
300 sq. yds. approach pavement	2.50	2.60
650 sq. ft. Portland cement sidewalks	.20	.20
30 lin. ft. new curb stones	1.50	1.00
80 lin. ft. curb stones reset	.75	.60
13,000 lbs. C. I. pipe & specials	.035	.035
13,000 lbs. metal reinforcement	.035	.04
70,000 lbs. structural steel	.055	.0605
14,000 lbs. machinery	.12	.14
122 sq. yds. wooden pavement	3.00	3.00
2,000 ft. B. M. yellow pine sawed lumber	55.00	55.00
70 lin. ft. lattice railings	2.00	2.25
Electrical equipment, complete, lump sum	1,800.00	1,720.00
Operator's cabin, complete, lump sum	400.00	400.00
Safety gate, complete, lump sum	500.00	500.00
Deduct price to be paid by contractor to state for existing structure	50.00	50.00
Total	$15,473.00	$15,997.00

SEWERS.—Seattle, Wash.—Bids in detail were received as follows on Oct. 18 by the City for the construction of sewers in Connecticut St. and other streets—(A) SPARGER CONCRETE CO., Colman Block, Seattle (awarded contract); (B) Grant Smith & Co., Seattle; (C) C. W. Colt & Co., Seattle (rejected); (D) Walker & Plachy, Seattle; (E) E. J. Rounds & Co., Globe Block, Seattle; R. H. Thomson is City Engr.:

	(A)	(B)	(C)	(D)	(E)
Fixed estimate	3,000.00	$3,000.00	$3,000.00	$3,000.00	$3,000.00
250 lin. ft. 15" pipe sewer	2.60	2.60	2.50	2.50	3.15
80 lin. ft. 24" pipe sewer	5.40	4.80	5.00	5.00	4.00
380 lin. ft. 36" circular brick sewer	11.75	10.00	10.50	11.00	6.25
2,442 lin. ft. 48" reinforced-concrete sewer	10.55	11.25	11.00	12.00	13.15
500 lin. ft. 54" reinforced-concrete sewer	11.75	12.50	11.70	13.00	11.35
592 lin. ft. 60" reinforced-concrete, Style A	12.70	13.50	12.00	15.00	13.35
150 lin. ft. 60" reinforced-concrete, Style B	15.20	16.50	14.20	18.00	16.60
1,327 lin. ft. 72" reinforced-concrete sewer	20.00	22.00	20.00	23.00	24.25
400 lin. ft. 24" × 36" Oviform brick sewer	11.80	12.00	10.50	10.00	14.50
80 lin. ft. wooden box	2.00	2.00	3.25	4.00	5.00
279 M. ft. B. M. lumber in foundations	25.00	22.00	22.00	20.00	20.00
1,534 piles in foundations	7.00	7.50	8.20	7.00	6.50
12 lin. ft. wooden manholes	3.00	3.50	2.00	2.00	2.00
2,680 lin. ft. creosoted wood stave pipe	5.00	5.30	4.75	4.25	7.40
83 M. ft. B. M. creosoted lumber	55.00	50.00	53.00	65.00	50.00
7,230 lin. ft. creosoted piles	.45	.50	.48	.50	.45
4 4¼-ft. manholes	75.00	55.00	80.00	70.00	45.00
22 3½-ft. manholes, special	65.00	50.00	40.00	60.00	45.00
1 manhole to be reconstructed	100.00	75.00	30.00	25.00	50.00
1 junction chamber	300.00	310.00	250.00	400.00	390.00
1 division chamber	350.00	310.00	250.00	300.00	275.00
100 cu. yds. extra concrete	10.00	9.00	12.00	8.00	9.00
5,000 lbs. extra steel	.06	.06	.06	.05	.06
Total	$121,151	$129,046	$123,531	$130,547	$138,938

*SEWERAGE, WATER-WORKS.—Canyon City, Tex.—Contract was let on Oct. 20 by the Aldermanic Board to H. A. CAMPBELL, of Armarillo, Tex., for the construction of sewer and water-works systems. Itemized bids were as follows—(A) Ockander Bros., Dallas, Tex.; (B) T. W. Moore & Son, Herford, Tex.; (C) F. H. Lancashire, Dallas; (D) Reese Peters, San Antonio, Tex.; (E) Kress Construction Co., Nowata, Okla.; (F) J. Jaeger, Kansas City, Mo.; (G) H. A. Campbell; (H) Collins Bros., Houston, Tex.; E. L. Dalton, Dallas, is Engr.:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
15,526 ft. 6" vitrified pipe, 0' to 6'	$0.33	$0.27	$0.31	$0.27	$0.29½	$0.25	$0.20	$0.30½
266 6 × 6" Y's	.24½	.25	.51	.40	.25	.26	.25	.75
14,538 ft. 8" vitrified pipe, 0' to 6'	.40	.34	.39	.36	.36½	.37	.28	.60
3,225 8" Y's	.44	.52	.75	.60	.35	.45	.35	.90
3,130 ft. 12" vitrified pipe, 0' to 6'	.53	.60	.50	.45	.58½	.52	.40	.63
6 12" Y's	.76	.75	1.21	.90	.75	.75	.75	1.40
667 6" plugs	.03	.03	.03	Free	.03	.03	.03	.25
4 standard manholes	45.00	40.00	37.50	25.00	28.00	29.00	39.00	60.00
79 standard lamp	2.00	1.00	2.11	1.00	2.00	1.00	1.00	2.00
Septic tank	1,200.00	1,500.00	1,568.30	1,054.10	1,500.00	1.175.00	1,100.00	1,650.00
1,440 ft. 6" c.-i. pipe laid	.67	.77	.67	.75	.75½	.71	.67	.80
600 ft. 8" c.-i. pipe laid	.98	.98	.90	1.00	1.62	.87	.98	1.00
17 fire hydrants	30.00	30.00	30.50	28.00	30.00	30.00	31.00	30.00
2 6" valves	16.00	14.00	14.00	15.00	17.00	18.00	16.00	16.00
3 8" valves	20.00	20.00	21.00	19.00	22.00	23.00	20.00	22.00
4 tons c.-i. fittings	60.00	65.00	60.00	60.00	65.00	65.00	60.00	65.00
1 80,000-gal. tank	2,775.00	2,800.00	3,055.00	2,800.00	2,775.00	2,700.00	2,550.00	3,300.00
1 50,000-gal. tank	3,700.00	3,600.00	3,895.00	4,100.00	3,700.00	3,800.00	3,300.00	3,950.00
1 40,000 crete tank	1,200.00	1,450.00	2,008.00	1,260.00	1,300.00	975.00	1,278.00	1,800.00
1 60-gal pump	1,800.00	1,900.00	220.00	1,700.00	1,800.00	1,025.00	844.00	2,000.00
1 pump house	200.00	200.00	210.00	200.00	175.00	375.00	110.00	200.00
Total	$31,729	$29,548	$32,275	$30,071	$31,389	$28,601	$25,808	$37,413

EXAMINATIONS.

BRIDGE DRAFTSMAN, ETC.—Albany, N. Y.—The State Civil Service Commission will hold examinations on Dec. 11, for the following positions: Bridge Designer, $1,500 to $2,100; Bridge Draftsman, $1,200 to $1,500. Junior Bridge Draftsman, $900 to $1,200. Applications should be filed on or before Dec. 4th. For detailed circular and application blank, address State Civil Service Commission, Albany, N. Y.

DYNAMO TENDER.—Ellis Island, N. Y.—The U. S. Civil Service Commission announces an examination on Dec. 15 to secure eligibles from which to make certification to fill a vacancy in the position of Dynamo Tender, $900 a year, Immigration Service, Ellis Island, N. Y., and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interests of the service to fill the vacancy by reinstatement, transfers, or promotion. Age limit, 20 years. Application form 1093.

STEAM ENGINEER.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Dec. 15, to fill two vacancies in the position of Assistant Engineer at $1,080 a year each, National Museum, Smithsonian Institution, and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interests of the service to fill either or both of the vacancies mentioned by reinstatement, transfer, or promotion. Age limit, 20 years. Application form 1093.

ASSISTANT.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Dec. 14-15, to secure eligibles from which to make certification to fill a vacancy in the position of Assistant (male), Naval Observatory, Bureau of Equipment, Navy Department, at $1,400 a year, and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interests of the service to fill the vacancy mentioned by reinstatement, transfer, or promotion. Age limit, 24 years. Application form 1312.

ASSISTANT GEOLOGIST.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Dec. 14-15, to secure eligibles from which to make certification to fill a vacancy in the position of Junior Geologist, qualified in paleontology, $900 a year, in the Geological Survey, and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interests of the service to fill the vacancy mentioned by promotion, reinstatement, or transfer. Age limit, 20 years. Application form 1312.

CHART ENGRAVER.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Dec. 8 to secure eligibles from which to make certification to fill a vacancy in the position of Chart Plate Engraver, $720 a year, Hydrographic Office, Bureau of Equipment, Navy Dept., and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interests of the service to fill the vacancy mentioned by reinstatement, transfer, or promotion. Age limit, 18 years. Application form 1093. Applications must be filed prior to closing hour on Dec. 8.

PHYSICAL LABORATORY AID.—Pittsburg, Pa.—The U. S. Civil Service Commission announces an examination on Dec. 15, to secure eligibles from which to make certification to fill a vacancy in the position of Physical Laboratory Aid, and vacancies requiring similar qualifications as they may occur, in the technologic Branch of the Geological Survey at Pittsburg, Pa., at a salary of from $600 to $960 a year, unless it shall be decided in the interests of the service to fill the existing vacancy by reinstatement, transfer, or promotion. Age limit, 18 to 25 years. Application form 1312. Applications must be filed prior to closing hour on Dec. 4.

INSPECTOR OF HARDWARE.—St. Louis, Mo.—The U. S. Civil Service Commission announces an examination on Dec. 15, to secure eligibles from which to make certification to fill a vacancy in the position of Inspector of Hardware, $900 a year, Subsistence Department, War Dept., St. Louis, Mo., and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interests of the service to fill the vacancy mentioned by reinstatement, transfer, or promotion. Applicants must be qualified, by reason of their special experience, to distinguish the difference between metals, such as wrought iron, cast iron, malleable iron, steel, etc., and be able to determine the quality of articles or hardware. Age limit, 20 years. Application form 1093.

ELECTRICIAN AND PLUMBER.—Angel Island, Cal.—The U. S. Civil Service Commission announces an examination on Dec. 15, to secure eligibles from which to make certification to fill a vacancy in the position of Electrician and Plumber, $1,200 a year, Immigration Service, Angel Island, Cal., and vacancies requiring similar qualifications as they may occur in any branch of the service, unless it shall be decided in the interests of the service to fill the vacancy mentioned by reinstatement, transfer, or promotion. The duties of the specific position to be filled require thorough knowledge of and experience in house-wiring, installation of electric-lighting fixtures; ability to care for and make slight repairs to arc lamps and motors, and to care for the plumbing system. Age limit, 20 years. Application form 1093.

ASSISTANT AND TEACHER.—Philippines.—The U. S. Civil Service Commission announces an examination on Dec. 29-30 to fill vacancies as they may occur in the positions of Clerk and Teacher in the Philippine Service. The entrance salary of the majority of male appointees will be $1,200 a year, although some appointments may be made at salaries of $1,000 or $1,100, based upon the experience and the relative standing in the examination, and they will be eligible for promotion up to $2,000 a year for Teachers. Eligibility in the assistant examination is required for promotion to the position of Division Superintendent, which carry salaries ranging from $1,600 to $3,000. The work of American men teachers is largely of a supervisory character, and the higher positions are filled as vacancies occur by the promotion of those who have demonstrated their efficiency and ability in the service. Heretofore the majority of those qualifying in the assistant examination who are willing to accept appointment as teacher have been selected. Others will be required in the various clerical and administrative offices in the islands. Men only will be admitted to the examination for assistant. Age limit, 18 to 40. Application forms 2 and 375.

INDUSTRIAL NOTES.

THE PRATT ENG. & MACH. CO., Atlanta, Ga., announces the removal of its New York office to Room 2005, Singer Bldg. This office is in charge of Asst. Sales Mgr. R. E. S. Geare.

THE ALLIS-CHALMERS CO., Milwaukee, Wis., announces that Mr. E. C. Sornborger has been appointed a sales engineer in the pumping engine and hydraulic turbine department.

CONTRACT has been awarded to Wm. B. Scaife & Sons Co., Pittsburgh, Pa., for several steel frame structures comprising the large addition to the plant of the Allegheny Steel Co. at Brackenridge, Pa.

THE STAR EXPANSION BOLT CO. announce the removal of their New Orleans, La., sales office to No. 504 Audubon Bldg., where strangers and friends alike will be welcomed by Mr. D. S. Miller.

THE ALBERS BROS. MILLING CO. Portland, Ore., has placed an order with the Minneapolis Steel & Machinery Co. for a 14 × 28 × 36-in; heavy duty cross compound Twin City Corliss engine which will be used for driving their mill.

THE ISZARD-WARREN CO. (Inc.), of Philadelphia, manufacuring surveying instruments, announces the removal of the manufacturing plant, salesroom and offices to its new four-story building at 136 N. 12th St., Philadelphia, Pa.

ROBERT W. HUNT & CO.—Mr. W. L. Cooper, Manager of the European business of this company, sailed from New York for London, Nov. 10 on the steamer "Lapland" after the completion of his annual business visit to the United States.

THE BIGELOW-HARRIMAN CONSTRUCTION COMPANY has awarded the contract for the concrete piling for the foundations of a paper mill that it is building at Montville, Conn., to the Raymond Concrete Pile Company of New York and Chicago. Geo. F. Hardy engineer.

THE C. H. & E. MFG. CO., Milwaukee, Wis., has recently brought out a new all-iron portable saw rig. This rig possesses a valuable feature for bridge and concrete construction in that it may be moved to any part of the work. The company reports that it is selling the factory capacity to the trade direct at the present time.

THE SAFETY CAR HEATING AND LIGHTING CO., 2 Rector St., New York City, has recently closed a contract with the United States Light-House Board for the furnishing of 18 B-III. Pintsch gas buoys complete with lanterns and 20 additional Pintsch gas buoy lanterns. The entire 38 lanterns above mentioned are to be supplied with the inverted incandescent mantle which has proved successful in service, increasing the projecting power of the lantern heretofore used.

THE ROBBINS-RIPLEY CO., Engineers and Contractors, has been formed, composed of Mr. Allan Appleton Robbins, M. Am. Soc. C. E., Pres., formerly Resident Engineer Rapid Transit Subway Construction Co. and Principal Assistant Engineer New York & Long Island R. R. Co., and Mr. John W. Ripley, M. Am. Soc. C. E., Secy.-Treas., formerly Chief Engineer Structural Dept., John Monks & Sons, New York City. The offices of the company are at 50 Church St., Hudson Terminal Bldg., New York City.

THE BALTIMORE & OHIO RAILROAD CO. placed orders recently with the Standard Steel Car Co., of Butler, Pa., for 2,400 steel hopper coal cars; with the Cambria Steel Co. of Cambria, Pa., for 1,000 steel hopper coal cars, and with the American Car & Foundry Co. of St. Louis for 1,000 steel underframe box cars. These orders call for $4,500,000 and complete the recently decided upon addition of 10,000 new cars of the largest capacity to the coal and general freight equipment of the system.

THE ALLIS-CHALMERS CO., Milwaukee, Wis., reports the sale to T. F. Fulkerson (Sapulpa, Okla.), of a four-cycle double-acting tandem gas engine of 360 HP., to work on natural gas from the Oklahoma gas belt. It is directly connected to a 60-cycle, three-phase, 2300-volt generator. The company has an order from the Lackawanna Bridge Co. for 25 direct-current 220-volt motors (some shunt wound and others compound wound) for operating shears, punches, etc. Most of them will be geared directly to the machines. The company reports also an order from the Diamond Rubber Co. (Akron, O.), for a low-pressure turbo-generator set of 1,000 KW., receiving its steam from the exhaust of the vulcanizers and other apparatus. The initial steam pressure will be about 16 lbs. absolute, and the vacuum from 26 to 28 ins. The pumps will be driven by small high-pressure engines, the exhaust from which will be used in the large low-pressure turbine.

THE SCHERZER ROLLING-LIFT BRIDGE CO., Monadnock Block, Chicago, states that its double track span, 200 ft. between centers of bearing, to carry the Baltimore & Ohio Ry. over the Cuyahoga River at Cleveland,Ohio, will be the largest double-track single-leaf bascule bridge yet constructed. The Seaboard Air Line Ry. has completed a single-track bridge of 196 ft. span at Tampa, Fla., and is building another across the Savannah River. The San Pedro, Los Angeles & Salt Lake Ry. has completed a bridge over the San Gabriel River at San Pedro Cal., and a combined railway and highway bascule bridge will span the navigation channel which crosses the new causeway to connect Galveston, Tex., with the mainland. Among foreign orders are those for a bridge to carry the Canadian Pacific Ry. over the Lachine Canal, an electric railway and highway bridge at Dublin (Ireland), and a bridge to carry the Buenos Ayres Great Southern Ry. over the Riachuelo River. The last is the third order from this South American railway.

TRADE PUBLICATIONS.

FORMING MACHINERY.—Blake & Johnson, Waterbury, Conn. Paper; 6¾ × 9 ins.; pp. 80; illustrated.

Rolling, slitting, punching, forming and pressing machinery is described in this catalog. There are also automatic machines for the manufacture of small articles from sheet metal and rods.

CONCRETE PAVEMENTS.—Universal Portland Cement Co., Chicago, Ill.; 6 × 9 ins.; pp. 20; illustrated.

This pamphlet is a reprint of a paper on "Cost and Value of Concrete Pavements." presented by Mr. T. H. Chubb at the Fifth Annual Convention of the National Association of Cement Users at Cleveland, O., Jan. 11-16, 1909.

WINDMILLS. TANKS AND PUMPS.—Fairbanks, Morse & Co., Chicago and New York. Paper; 6 × 9 ins.; pp. 32; illustrated.

A brief and interesting essay on the windmill, with special reference to the machine made by this company, occupies the first part of this pamphlet. In addition, various windmill accessories, tanks and pumps are described.

METAL STUDS, FURRING AND LUMBER. —The Berger Mfg. Co., Canton, O.; 4 × 9 ins.; pp. 48; illustrated.

This company makes various pressed metal sections to be used for the secondary framework of buildings. It is especially adapted to a concrete finish. The catalog illustrates the various sections made, their application to building construction and the many structures in which they have been used.

REPAIR WAGONS FOR ELECTRIC RAILWAYS.—J. R. McCardell & Co., Trenton, N. J. Paper; 5¼ × 8 ins.; pp. 24; illustrated.

These are horse-drawn wagons fitted with telescopic tower and folding cantilever platform for repairs to trolley lines. The cantilever tower makes the overhead work accessible while the wagon stands clear of the track so as not to interfere with the cars.

ASBESTOS PROTECTED METAL.—Asbestos Protected Metal Co., Canton, Mass.; 6 × 9 ins.; pp. 32; illustrated.

This material is composed of a layer of sheet steel to which is applied first a coating of special asphalt compound at a temperature of 600° F. and then a layer of asbestos felt. This sheet is to be used for roofing and siding and is claimed to be particularly long-lived. The catalog describes the material and its uses.

GASOLINE ENGINES.—Fairbanks, Morse & Co., Chicago, Ill. Catalog 80-D. Paper; 6 × 9 ins.; pp. 64; illustrated.

A new 1-HP., four-stroke cycle engine called the "Jack Junior" is described in this catalog. The principles of operation and details of construction of Fairbanks-Morse engines are described and there are numerous suggestions for the use of small gasoline engines for isolated and domestic pumping plants, electric-light plants, etc.

DIGGING MACHINERY.—The Hayward Co., 50 Church St., New York. "Digging Machinery Catalog No. 36"; 9 × 6 ins.; pp. 111; illustrated.

According to a preface "the purpose in issuing this catalog is not so much to show the types of machines built by ourselves as to clearly illustrate the many uses of Hayward orange peel and clam shell buckets and their application to machines of other makes." It is a remarkably complete catalog.

STEEL TAPES, LEVELING RODS, ETC.—Chicago Steel Tape Co., 6229-6233 Cottage Grove Ave., Chicago. Paper; 4 × 6 ins. pp. 16; illustrated.

The special features of "Chicago" steel tape are set forth, and it is noted that a guarantee against breaking is given by this company. Reels, handles and the "Eureka" tape splice are also listed. Other specialties include ribbons for leveling rods, the "Chicago" leveling rod, stadia targets and steel lining poles.

WIRE-CUT LUG PAVING BRICK.—The Dunn Wire-Cut Lug Brick Co., Conneaut, Ohio. Paper; 6 × 9 ins.; pp. 8; illustrated.

Mr. Frank B. Dunn, the opening paragraphs of this pamphlet state, has invented a "simple method of deflecting the wires during the process of cutting" paving brick, thus placing lugs or ribs on the wire-cut surface of the brick, which was the only point of advantage in the repressed brick. By this means, lugs may be secured without repressing. Grooves may also be secured, if desired, or the grooves left by the material which forms the lugs may be filled. The pamphlet describes briefly the devices employed to effect the results stated, and gives also the advantages claimed for the style of brick thus made.

SURVEYING INSTRUMENTS.—The J. C. Ulmer Co., 113 Prospect Ave., N. W., Cleveland, Ohio. Bulletin No. 51, Transits of Precision; 6 × 9 ins.; pp. 25; illustrated.

This particular catalog is the latest from this firm describing its transits for precise work of which it makes a specialty. Although the prices are somewhat higher than for the ordinary transit, they do not appear to be as high as are usually charged for instruments of such delicate adjustment and capabilities of precision.

STEAM-ENGINE INDICATIONS.—Trill Indicator Co., Corry, Pa. Paper; 6 × 9 ins.; pp. 42; illustrated.

This booklet describes steam-engine indicators, the "Faultless" reducing wheel, Trill planimeter and indicators for high-pressure and ammonia work. Besides the description of the apparatus, interesting discussions are given of numerous cards and the causes of various unusual curves are pointed out. A method is given for drawing adiabatic and saturation curves. There is a chapter on indicating gas engines, with discussions of faulty diagrams, and a chapter on indicating compound engines and drawing combined cards.

REINFORCED-CONCRETE PILES AND TIES.—A. C. Chenoweth, 16 Court St., Brooklyn, N. Y.; 11 × 8 ins.; pp. 22; illustrated.

The Chenoweth pile and tie each is made by winding a layer of concrete and woven wire around a core pipe, so that the finished section is a rectangle or circle of concrete with a spiral reinforcement of woven wire. This catalog describes a number of works where the members have been used and also a series of tests.

SWITCHES, FROGS AND TRACK SPECIAL WORK.—Indianapolis Switch & Frog Co., Springfield, Ohio. Paper; 11½ × 8½ ins.; pp. 84; illustrated.

This pamphlet contains mainly half-tone and line engravings of frogs, crossings and switches for standard and light track. It includes mine and industrial narrow-gage track, and has diagrams of track layouts at coal-mine tipples, etc. Several pages are devoted to street railway special work, including turnouts, junctions and intersections. In this work, spring tongue switches and fixed mates are used.

For other Proposal Advertisements see pages 51, 52, 53, 54, 56, of Advertisements and Construction News page 182.

WATER-WORKS MACHINERY.

Indianola, Miss.

Sealed proposals will be received by the Mayor and Board of Aldermen of the Town of Indianola, Miss., until 2 p. m., Dec. 2, 1909, for the following machinery and materials:

One 60 HP. Gasoline Engine and Pump, with all necessary fittings, tank and appurtenances thereto, erected on foundation, ready for successful operation.

1500′ of 8″ c. i. water pipe.
1—8″ Gate valve.
1—6″ Gate valve.
2—6″ Check valves.
1—8″ Check valve.
1—8″ Hydraulic valve.
1—6″ Hydraulic valve.

For plans and specifications see Engineering News Publishing Co., New York City, and W. M. Kembaugh, Town Clerk, Indianola, Miss.

Certified check of $100 must accompany each bid. Town reserves the right to accept or reject any or all bids.

J. L. DAVIS,
Mayor.

W. M. KEMBRAUGH,
Town Clerk.
R. C. HUSTON,
Consulting Engr., 725 Maison Blanche, New Orleans, La.

LIFT BRIDGE.

Cincinnati, Ohio.

Sealed bids will be received by the Board and Director of Public Services of the City of Cincinnati, State of Ohio, at the office of said Board and Director of Public Service, until 12 o'clock noon of MONDAY, December 6, A. D. 1909, for furnishing the necessary labor and materials for the superstructure and substructure work of lift bridge at Mohawk Place over the Miami and Erie canal, in connection with the remodeling of the adjoining streets and sidewalks, according to plans and specifications on file in said office.

Every bid must contain the full name of every person or company interested in the same and be accompanied by a bond in the sum of $1,000.00 (one thousand) dollars, to the satisfaction of the Board and director of Public Service, or a certified check on some solvent bank, as a guaranty that if the bid is accepted a contract will be entered into and its performance properly secured. Should any bid be rejected, such check will be forthwith returned to the bidder; and should any bid be accepted, such check will be returned upon the proper execution and securing of the contract.

Bidders are required to use the printed forms. The right is reserved to reject any and all bids.

By order of the Board and director of Public Service.

November 13, 1909.

JOHN J. WENNER, Clerk.

BRIDGE.

Phoenix, Ariz.

Sealed proposals addressed to the Board of Control of the Territory of Arizona, at Phoenix, Arizona and endorsed "Proposal for the construction of a highway bridge over the Gila River, near the town of Florence, Pinal County, Arizona," will be received by the Secretary of said board, at the office of said board in the Capitol building at Phoenix, Arizona, until two (2) o'clock local time in the afternoon of Wednesday the 8th day of December, 1909, and will be opened publicly by said board at a meeting to be held on that day or on the first meeting thereafter.

The work for which said proposals are invited is to provide for the construction of a reinforced concrete bridge seven hundred feet long, the plans and specifications for which are now on file in the office of the Territorial Engineer and can be had on application and payment of $10.00, which amount will be returned upon the surrender of the plans and specifications.

The Board of Control reserves the right to reject any and all bids.

Complete information on application to the office of the Territorial Engineer.

The Territory of Arizona, by its Board of Control,

J. J. RIGGS, Secretary.

U. S. Engineer Office, Wilmington, Del., Nov. 12, 1909. Sealed proposals for dredging Alloway Creek, N. J., will be received here until 10 a. m., Dec. 13, 1909, and then publicly opened. Information on application. L. H. Rand, Capt., Engrs.

Situations Open

PERMANENT POSITION for experienced superintendent for mining rock in cement plant in Illinois. Address "Y. 21," Engineering News, 1636 Monadnock Block, Chicago. 21-1t

WANTED—First-class shop superintendent for structural work, New York City. Only hustlers need apply. Address "S. B. 21," Engineering News, New York. 21-1t

Miscellaneous Wants

Address Wanted

Will B. A. LUDGATE, civil engineer, formerly with M. K. & T. Ry., near Denison, or his friends, please send me his address?

F. C. GUNN,
Postal Bldg., Kansas City, Mo.
21-1t

FOR SALE

BRIDGE TRAVELER

FOR SALE.

Can handle girders or lattice trusses up to 60 tons weight and 140 feet in length. Present owners have just successfully completed the erection of a number of such bridges, but having no further work in view for traveler are willing to dispose of it at a reasonable prices. Address 21-4t

ENGINEERING-CONSTRUCTION CO.,
407 Coal Exchange Bldg., Scranton, Pa.

FOR SALE.

Volumes of

ENGINEERING NEWS

from 1886 to 1894, inc.; well bound and in perfect condition. Will sell singly or in lots to suit purchaser. Address

GORDON ELMSLIE,
c/o Dominion Bridge Co., Montreal.
21-2t